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PROCESSOR
Products, News & Information Data Centers Can Trust. Since 1979

Make The Most Of Your Cooling

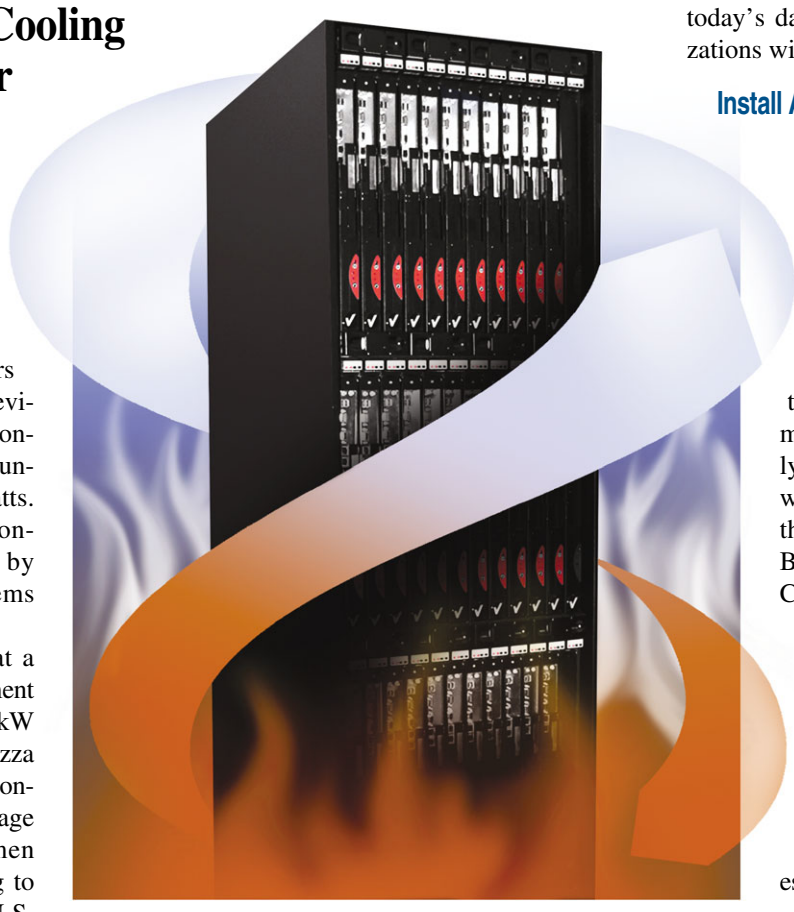
The Evolution Of Cooling In The Data Center

by Mark Brownstein

• • •

THE CONCENTRATION OF computing equipment in the SME has been growing at an unprecedented rate during the past few years. With the use of blade servers, dozens of servers have fit into rack space that previously held only a few. Power consumption has increased from hundreds of watts to many kilowatts. With the increase in power consumption, the heat produced by these exceedingly dense systems has climbed.

Today, it is not unlikely that a rack can be loaded with equipment using as much as 20kW. "A 20kW rack puts out more heat than a pizza oven," Kris Domich, principal consultant of data centers and storage at Dimension Data (www.dimensiondata.com), notes. According to a report to Congress by the U.S. Environmental Protection Agency submitted last August, data centers account for 1.5% of the nation's electricity use—and that amount is expected to double in the next five years.



This massively increased amount of thermal generation requires careful attention to best practices in order to manage the increasingly complex cooling issues in today's data centers and those that organizations will be facing in the future.

Install A Power Meter In The Data Center

In last year's "Report On Server and Data Center Efficiency," the EPA recommended that data centers install power meters. Power and cooling are intimately interconnected. "Without a power meter in the data center, there is no accurate way to know what impact changes made in the data center are actually having. It's important to know where you are so you can detect the results of changes," says Eric Birch, vice president of Degree Controls (www.degreec.com).

Rick Hayes, principal technologist at GlassHouse Technologies (www.glasshouse.com), notes that keeping tabs on power usage is essential to being able to regulate data center cooling. "Amps equate to BTUs," he says. "You can't do a cooling estimate without a power estimate."

Seal Up Leaks

It's important to take control of airflow in the data center, assuring that hot air isn't

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Safeguard Your Corporate Laptops

Be Proactive In Protecting Notebooks & Data

by Chris A. MacKinnon

• • •

WE'VE BEEN HEARING about the staggering number of laptop thefts over the past number of years, but has the reality sunk in? According to Safeware Insurance Agency (www.safeware.com), more than 600,000 laptops are stolen every year, which translates into an estimated $5.4 billion loss of proprietary information. And depending on whom you talk to, this number keeps on growing. According to the FBI, a whopping 97% of stolen computers never return to their rightful owner. As more and more workers in the small to midsized enterprise shift to a mobile way of life, companies need to be thinking about how to safeguard their notebooks.

Education Is Key

According to Ben Haidri, vice president of business development at Absolute Software (www.absolute.com), one of the best ways to beef up corporate laptop security is to educate and train your end users. He explains, "For small businesses in particular, the use of notebook computers in a business setting is still in relative infancy. Unlike multinationals who have supported traveling executives with notebooks for many years, SMEs have not developed a process for educating employees on the

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As more workers in the SME shift to a mobile way of life, companies need to be thinking about how to safeguard their notebooks.

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The growing adoption of the SaaS application model is fueling acceptance of Web-based application services.

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IT and business managers increasingly see the need for a good enterprise search application to help them locate and manage the diverse content throughout their business.

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■ **Aladdin Knowledge Systems** released eSafe 6 Feature Release 2, which includes dual antispam engines that offer zero-hour antispam and malware outbreak prevention and enhanced content security. ■ **IBM** released the System z10 mainframe, which was built to reduce power, cooling costs, and floor space. ■ **iTrinegy** introduced INE Companion, which provides network analysis with the capture and relay of real-time network conditions. ■ **Lumeta** released IPsonar 4.0, which enables organizations to handle both network change and risk management. ■ **Nuance Communications** unveiled an Automatic Password Reset module. ■ **Proginet** released the CFI Attachment Manager, a software-based platform for managing incoming and outgoing email attachments. ■ New 3Gbps SAS/SATA RAID controllers from **Promise** aim to increase scalability and flexibility in the data center. ■ **Reconnex** unveiled its Data Loss Profiler, an appliance-based platform that lets security personnel know when any confidential or sensitive data leaves the network. ■ **St. Bernard Software** released the iPrism IM Filter and version 6.0 of the iPrism Web Filter.

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1. **What is the size of your company (how many employees)?**
   - ☐ Less than 10
   - ☐ 10 to 99
   - ☐ 100 to 199
   - ☐ 200 to 499
   - ☐ 500 to 999
   - ☐ 1,000+

2. **How often do you purchase computer hardware/software?**
   - ☐ Weekly
   - ☐ Bi-weekly
   - ☐ Monthly
   - ☐ Quarterly
   - ☐ Annually
   - ☐ No Involvement

3. **What is your annual computer hardware/software purchasing budget?**
   - ☐ $0 to $9,999
   - ☐ $10,000 to $24,999
   - ☐ $25,000 to $49,999
   - ☐ $50,000 to $99,999
   - ☐ $100,000 to $249,999
   - ☐ $250,000 to $499,999
   - ☐ $500,000 to $999,000
   - ☐ $1,000,000+

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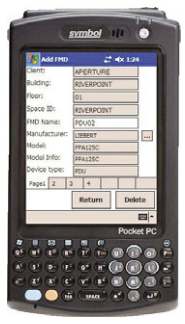
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Know Your Equipment

Aperture VISTA Data Capture Handheld Simplifies Asset Tracking



CAPTURING DATA ON equipment configuration and physical resources is no small task. That's why Aperture created VISTA Data Capture Handheld for use with its data center management system, Aperture VISTA. This handheld and software makes it possible for data center administrators to cost-effectively, accurately, and predictably collect detailed information about the equipment and resources in the data center.

Tracking details about the equipment an organization owns, where it is located, and what it is connected to is difficult. Traditionally, companies would send staff into the data center to record this information on paper and re-enter it into the computer later. This process is error-prone and time-consuming. The VISTA Data Capture Handheld helps to eliminate those data entry errors and gives organizations the ability to easily collect the data they need and upload it into Aperture VISTA.

The Aperture VISTA Data Capture Handheld includes the VISTA Data Capture Application installed on a Windows Mobile device. Using this combination of hardware and software, organizations can allow Aperture Certified Partners to collect data in their data centers for uploading into Aperture VISTA, or a company can capture data itself using training and certification from Aperture. Regardless of the method of collection, Aperture's Data Services organization performs final validation.

While capturing data, the handheld can read existing barcode asset tags or can help with the configuration of new ones. To increase accuracy, the handheld uses Aperture's reference library of vendor equipment to validate data as it is entered; collision checking ensures that floor-placed devices don't overlap each other.

Aperture VISTA Data Capture Handheld

About $5,000 per device

Quickly and accurately collect valuable data center information for use with Aperture VISTA

(800) 346-6828

www.aperture.com

Aperture



Low-Cost Tiered Storage

3PAR Offers Nearline For Online For Consolidated Storage

FIBRE CHANNEL DRIVES are used for demanding online applications and are also quite expensive. Less-demanding nearline apps are relegated to cheaper enterprise-class SATA drives. 3PAR's Nearline for Online tiered storage platform enables administrators to use SATA drives for the more intensive online applications, saving company costs.

The technology that makes this possible includes 3PAR's purpose-built virtualized storage platform, InServ Storage Server, which widely stripes data across all its enterprise-class SATA drives. The tiered storage array is built on a virtualized platform that supports a variety of tiers, including 146GB Fibre Channel, 400GB Fibre Channel, and 750GB enterprise-class SATA drives.

Another feature of the InServ Storage Server is Rapid RAID Rebuild. In the event of a drive failure, the server is designed to rapidly and accurately rebuild RAID protection with its parallel, virtualized design. Instead of rebuilding the entire drive, Rapid RAID Rebuild finds and restores only the lost data across a broad, distributed set of drives. The restored data is distributed across the drive array, which allows the system to function at a high level while returning to a fully protected state.

3PAR's server also features internal drive tiering, which allows administrators to configure drive capacity of both Fibre Channel and Nearline storage tiers. With 3PAR's Dynamic Optimization, administrators can also configure data service levels as needed across both storage tiers with a single command.

3PAR Nearline For Online

Starts at $72,000 for a 12TB configuration

Leverages InServ tiered storage technology to enable administrators to assign intensive online applications to less-expensive enterprise-class SATA drives, saving a company costs associated with more expensive Fibre Channel drives

(888) 372-7226 ext. 2

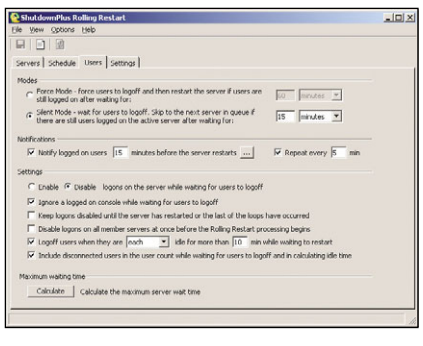
www.3par.com

3PAR

Save Your Servers

Automatically Restart With WM Software's ShutdownPlus Rolling Restart 7.0

A RESTART SCHEDULE is important with servers that run 24/7. Servers can become slower over time due to improper cleaning of registries and closing of user sessions. With users who stay logged on, you'll want to make sure they don't get locked out when the server reboots. ShutdownPlus Rolling Restart 7.0 from WM Software runs on all versions of Windows Server OSes and helps automatically log off users, close registries, and shut down/restart servers without requiring IT staff to schedule server restarts around users' time commitments.



ShutdownPlus Rolling Restart 7.0 can automatically reboot servers without affecting users.

ShutdownPlus Rolling Restart is designed to shut down terminal servers on a round-robin schedule through a hub-and-spoke model, so one server is the master and the others are member servers. The master server selects a member server to restart, disables that server's logons, and then restarts the server. Once the member server has been restarted, logons are re-enabled, and the master server moves on to the next server. Users will receive a notification that their server will be restarted, and the master server can force log-offs immediately or after a defined time.

The member server must wait until all users are logged off before restarting, and ShutdownPlus 7.0 features a Silent Mode to skip servers and retry later if users are still logged on. When logons are forced on a server set to restart, the software's load balancing can automatically place the user on another server. It's compatible with Citrix.

WM Software ShutdownPlus Rolling Restart 7.0

Starts at $245 per server license

Allows IT managers to control and automate standard terminal server restarts

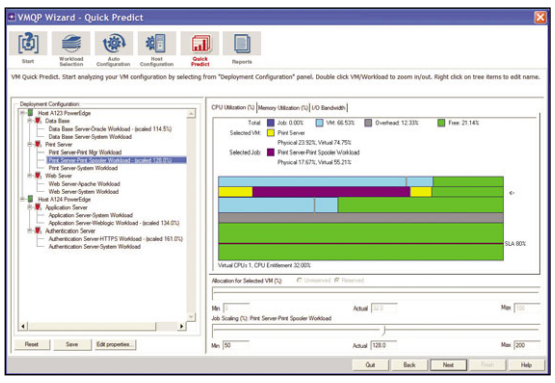
(330) 558-0501

www.wmsoftware.com

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Every Server, Every User, Every Day™

Gauge Consolidation, Virtualization Impact

OPNET IT Guru Systems Planner 14.5 Eliminates Guesswork



IT Guru Systems Planner VMQP shows workloads of current servers to help you predict if virtualization will benefit your enterprise.

IN A TIME WHEN industry analysts and experts are regularly citing the high rate at which enterprises are adopting server virtualization, OPNET Technologies has released a new tool to assist enterprises in such transitions. VMQP (Virtual Machine Quick Predict) gives IT qualified information it can use to make decisions and investments related to virtualization.

Introduced as a new feature within OPNET's IT Guru Systems Planner 14.5—an application designed to help manage systems capacity planning across physical and virtual servers—VMQP estimates the impact server consolation and virtualization will have on performance.

VMQP provides guided workflows that help surmise server workloads to predict if virtualization will more efficiently utilize resources. Using simulation-based analysis that takes into consideration applications already in use, as well as user volumes, VMQP automatically determines the capacity needed for the host server and virtual machines.

IT Guru Systems Planner integrates with OPNET's ACE and IT Guru Network Planner applications, providing users end-to-end capacity planning and performance-management information and tools. The software also integrates third-party monitoring tools for server performance that assist companies in accurately planning server capacity in terms of support growth, server consolidation, and application deployment.

OPNET Technologies IT Guru Systems Planner 14.5

Helps manage systems capacity planning across physical and virtual servers; a new feature estimates the impact of server consolidation and virtualization

(240) 497-3000

www.opnet.com

OPNET Making Networks and Applications Perform™

Assault On Data Center Dilemmas

Verari's BladeRack 2 XL Provides Dense Processing, Storage, Or Both



Consolidation in the data center becomes tantalizingly possible with Verari's BladeRack 2 XL.

DATA CENTERS want the energy efficiency and high density blade servers can provide. The less power and space consumed by storage and processing hardware, the better, assuming capacity and throughput aren't compromised.

Verari Systems is dedicated to this ideal. The company's new BladeRack 2 XL computing and storage platform features 85% or greater power efficiency (with 208VAC input) and support for 200 to 240VAC power.

The system supports up to 72 blades and up to 144 servers on double server nodes. Computing and storage blades can be intermixed. The maximum processor core count for the BladeRack 2 XL is 576. Alternatively, when used strictly for storage, its max capacity using 3.5-inch drives is 672TB per rack.

Verari Systems BladeRack 2 XL

Starts at less than $100,000 fully populated

Data consolidation platform offering flexibility and power in a small footprint

(888) 942-3800

www.verari.com

Verari systems

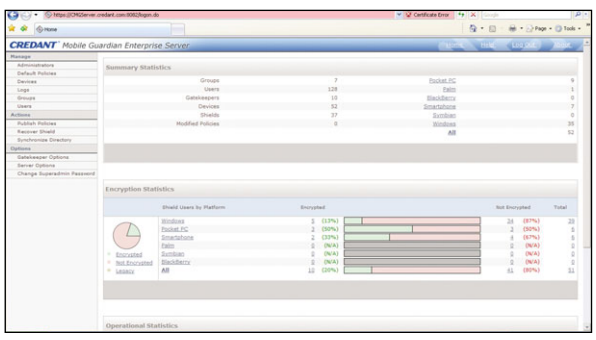
Verari says a single rack could hold up to 96 processing cores and 576TB of storage when configured for a typical Web 2.0 server application.

Verari's Vertical Cooling Technology is a crucial piece of the puzzle when a system boasts the density of the BladeRack 2 XL. Without the superb ventilation Vertical Cooling Technology provides, hard drive life would be shortened and processing speed would suffer, as thermal overloads would induce CPUs to throttle their speeds to reduce heat dissipation. Without Vertical Cooling Technology, the BladeRack 2 XL's space-saving design would become a liability in the performance and reliability columns.

Despite its high density and power efficiency, the XL is the low-cost member of the BladeRack 2 X-series family. It leaves out redundant power support and uses a less robust IPMI management system instead of VCC. However, the XL features the option to use addressable power strips, unlike the rest of the X-series.

Enhanced Mobile Security

Mobile Guardian Protects Data With Improved Encryption



CREDANT Mobile Guardian Enterprise Edition 6.0 provides detailed information about groups, users, devices, encryption, and more.

IT'S NOT ENOUGH to protect data on servers and desktop clients. Today's threats require that companies take measures to also protect data stored on or transferred to mobile devices. CREDANT Technologies' latest release of CREDANT Mobile Guardian, aka CMG, Enterprise Edition can provide just this type of protection.

CMG Enterprise Edition 6.0's features include Full Data Encryption2, a form of disk encryption that was developed specifically to protect Windows and Vista platforms. Full Data Encryption2 provides policy-based options to protect a variety of endpoints. This encryption method offers more complete protection than other technologies. Full Data Encryption2 is based on the Intelligent Encryption engine and is FIPS 140-2 validated.

CMG Enterprise Edition also includes CMG Enterprise Edition Shield for Windows, which provides protection for data on notebooks and desktops. External Media Shield protects data that is transferred from a notebook or desktop to external media.

Vista Shield offers more security benefits. This tool can replace Bitlocker, or it can work together with Bitlocker to protect a company from internal threats.

Mobile devices can contain sensitive data that is vulnerable to attack or theft, and the devices themselves can also be vulnerable to theft. By providing Full Data Encryption2, CREDANT Technologies helps companies ensure that data stored on mobile endpoint devices is protected. The software provides tools for managing this encryption, as well as advanced auditing and reporting tools for proving that proactive steps were taken to secure the data.

CREDANT Mobile Guardian Enterprise Edition 6.0

$85 per user

Complete encryption and protection for data stored on mobile devices and storage media

(866) 273-3268

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CREDANT We Protect What Matters

Single Console, Simple Management

Sun xVM Ops Center Works With All Assets, Regardless Of OS Or Platform



Use the Sun xVM Ops Center to deploy routine administration tasks.

MANAGING SERVERS, networks, and storage becomes more complicated as organizations move toward virtualization. That's why Sun developed its Sun xVM Ops Center, a scalable data center automation tool that operates from a single console.

Sun xVM Ops Center's enterprise-grade components, openness, and interoperability distinguish it from its competitors. Regardless of the OS or hardware platform, the program deploys routine administration tasks such as firmware updates, bare-metal OS provisioning, patching, and updating. It includes a current view of the system state, patch status, and software portfolio, so you can get quick, precise reporting and compliance validation.

The program features server discovery, inventory management, and firmware and bare-metal server provisioning. It's able to scan and find servers across a network and also offers automatic installation of bare-metal OSes, RPMs, and firmware. Sun xVM Ops Center improves patch and update management, minimizing downtime for Red Hat, SuSE, and Solaris. Sun xVM Ops Center can also watch parameters and resolve problems, resulting in secure and remote control of users and data center resources.

Sun xVM Ops Center

Satellite server costs $10,000 (annual subscription) and $100 to $350 per year per managed server

Highly scalable data center automation tool that operates from a single console

(800) 786-0404

www.sun.com/software/products/xvmopscenter/get.jsp

Sun microsystems

MarketPlace NEWS



Yahoo!, Time Warner Reportedly In Talks

In a move that would end Microsoft's play to acquire Yahoo!, Time Warner and Yahoo! have entered into discussions regarding a partnership. Under the proposal, Time Warner's AOL would be acquired by Yahoo! in exchange for Time Warner taking a large minority stake in the combined company. It has been estimated that the companies could save $1 billion a year under the deal. Yahoo! has also been undergoing talks with News Corp., regarding a possible deal where Yahoo! would purchase MySpace.com in exchange for a stake in News Corp.

2007 Record Year For Server Market

Server revenue last year was the highest it's been since 2000, reaching $54.4 billion, according to research firm IDC. There were about 8 million servers shipped last year, up about 6.7% from 2006. IBM ranked first in worldwide server revenue, at $17.3 billion, followed by HP with $15.4 billion and Dell with $6.15 billion. Blade server revenue continued its phenomenal growth, up 54.2% in the fourth quarter of last year. IDC attributes much of last year's overall server market growth to increased spending by IT departments and the adoption of x86 servers. However, IDC warns that 2008 might see a slowdown caused by the general economic uncertainty.

"Spam King" Trial Date Set

Robert Soloway, the so-called "spam king," will face a criminal trial this month. The trial, set to take place in Seattle, comes as a result of charges of fraud and identity theft under the CAN-SPAM Act, which could result in jail time for Soloway. In addition, the U.S. Attorney's Office is seeking more than $750,000 in fines. Soloway allegedly used a series of zombie computers to send out millions of unsolicited emails. He was ordered to pay Microsoft more than $7 million in fines as a result of earlier charges.

Virginia Upholds Spammer Conviction

The Virginia Supreme Court has upheld the 2004 conviction of a spammer, rebutting his arguments that the First Amendment protects spamming. Jeremy Jaynes, who was charged under Virginia's Anti-Spam Act, is believed to be the first person with a spam-related felony conviction in the United States. Authorities believe he sent as many as 10 million messages a day during July and August of 2003 and made as much as $750,000 a month. Jaynes was sentenced to nine years in prison; he could still appeal the ruling to the U.S. Supreme Court.

IE8 To Be Standards-Compliant

According to a recent announcement by Microsoft, when the new Internet Explorer 8 Web browser is released, it will default to a new, standards-compliant method to display Web pages. Previous versions of IE used a more Microsoft-centric method. A posting on Microsoft's IEBlog states that the change was made as a result of Microsoft's published Interoperability Principles, noting "interpreting Web content in the most standards-compliant way possible is a better thing to do." The change will enable Web designers to create Web pages that are more easily viewed in a variety of browsers instead of tailoring them specifically for IE.

Nortel Reports Q4 Loss, Announces Job Cuts

According to recently released numbers, Nortel Networks reported fourth-quarter losses of $844 million, or $1.70 a share, compared to a loss of $80 million, or 19 cents a share, during the same quarter in 2006. The company, which is the largest maker of telephone equipment in North America, blamed the loss on a large one-time, noncash tax charge of $1.1 billion resulting from changes in its Canadian tax profile. Nortel has also announced that it will cut 2,100 jobs and relocate another 1,000 jobs. The changes will mean an annual gross savings of about $300 million.

Yahoo!: Takeover Bid Distracting

According to Yahoo!'s annual report filed with the U.S. Securities and Exchange Commission, the unsolicited takeover bid proposed by Microsoft has become a distraction for the company. In addition, the company stated that the proposal has resulted in an "uncertainty" that Yahoo! worries may become distracting to employees and affect business. Yahoo! also expressed concerns that the bid may have on stock: "We further believe that, as a result of Microsoft's unsolicited acquisition proposal and speculation concerning a potential acquisition, the future trading price of our common stock is likely to be volatile and could be subject to wide price fluctuations."

Novell Buys PlateSpin

Just weeks after its acquisition of open-source collaboration vendor SiteScape, Novell announced it has purchased PlateSpin, which specializes in data center management solutions. Novell says the buy will boost its market position in the next-generation data center field and will enhance its ability to provide open-source virtualization. PlateSpin will become part of the Systems and Resource Management segment at Novell. The deal, which is slated to be completed during Novell's second fiscal quarter, is worth $205 million. Novell President and CEO Ron Hovsepian says the PlateSpin acquisition will enable Novell to "deliver the next-generation infrastructure software that is at the core of the data center."

DOJ & FTC Approve Oracle BEA Acquisition

The Federal Trade Commission and the U.S. Department of Justice have both given their official OK on Oracle's purchase of BEA Systems, a deal worth an estimated $8.5 billion, bringing the merger two steps closer to completion. The European Commission still has to give its approval for the acquisition, and so do BEA stockholders, who are planning a special meeting April 1. BEA rejected Oracle's original offer late last year, saying the bid was inadequate, and asked for a higher bid, which Oracle declined to offer. However, in mid-January, the companies agreed on a purchase price.

Gartner Lowers Chip Forecast

Global economic problems and falling prices for memory chips have caused market research firm Gartner to lower its forecast for 2008 global semiconductor sales. Gartner had originally projected a 6.2% growth in revenue this year; the firm now expects revenue growth to be about 3.4%, with sales of about $278.4 billion. In 2007, semiconductor revenues were up 2.5% with sales of $269.4 billion. Garter analysts cautioned that the revised outlook may need to change once again, saying "the demand side of the semiconductor industry could get (much) worse, which could cause a contraction in the market this year."

Microsoft Cuts Vista Prices

Microsoft is dropping the prices on most consumer versions of Vista. The price cuts will vary, with some countries in emerging markets seeing cuts as much as 48% and developed nations such as the United States seeing a much smaller drop in price. As an example, Brad Brooks, Microsoft's corporate vice president for Windows Consumer Product Marketing, says Microsoft is combining full and upgrade versions of Home Basic and Home Premium into full versions for emerging markets. Brooks says the price cuts are aimed at expanding Windows standalone sales to other segments of the consumer market. The price cuts will take effect with the release of Vista Service Pack 1.

Language Packs Cause Vista SP1 Delay

Service Pack 1 for Windows Vista Ultimate will not initially be available for users with certain language packs installed, according to Microsoft. In a posting on Microsoft's Windows Vista blog, product manager Nick White said Microsoft will be releasing Windows Vista SP1 in two waves. White says the first wave will only provide Windows Vista SP1 to Windows Vista Ultimate PCs running English, French, German, Japanese, and Spanish. The second wave, which is expected sometime in April, will support all 36 languages.

WATCH THE STOCKS

This information provides a quick glimpse of current and historical stock prices and trends for 15 major companies in the technology market.

Company	Symbol	Year Ago	Feb. 27 $	March 5 $	% change from previous week
BEA Systems	BEAS	$11.40	$19.08	$19.11	▲ 0.16%
Computer Associates	CA	$25.29	$23.55	$22.90	▼ 2.76%
Cisco Systems	CSCO	$25.46	$24.95	$24.27	▼ 2.73%
Dell	DELL	$22.53	$20.77	$19.79	▼ 4.72%
Electronic Data Systems	EDS	$27.37	$18.63	$17.17	▼ 7.84%
Google	GOOG	$440.95	$472.86	$447.70	▼ 5.32%
HP	HPQ	$38.75	$48.94	$48.31	▼ 1.29%
IBM	IBM	$91.81	$116.46	$115.39	▼ 0.92%
Intel	INTC	$19.11	$20.77	$20.20	▼ 2.74%
McAfee	MFE	$29.55	$34.94	$33.69	▼ 3.58%
Microsoft	MSFT	$27.55	$28.26	$28.12	▼ 0.5%
Oracle	ORCL	$16.37	$19.19	$18.80	▼ 2.03%
Red Hat Software	RHT	$21.71	$18.34	$17.70	▼ 3.49%
Sun Microsystems	JAVAD	$6.07	$17.70	$16.46	▼ 7.01%
Symantec	SYMC	$16.69	$17.50	$17.02	▼ 2.74%

NOTE: This information is meant for reference only and should not be used as a basis for buy/sell decisions.

Upcoming IT Events

- MARCH -

VoiceCon
March 17-20
Orlando, Fla.
www.voicecon.com

Boston SecureWorld Expo
March 26-27
Boston, Mass.
www.secureworldexpo.com

Data Center World
March 30-April 3
Las Vegas, Nev.
www.afcom.com

- APRIL -

FOSE
April 1-3
Washington, D.C.
www.fose.com

Gartner Business Intelligence Summit
April 1-3
Chicago, Ill.
www.gartner.com/it/summits/bi6/index.jsp

Gartner Symposium/ITxpo
April 6-10
Las Vegas, Nev.
www.gartner.com/it/sym/2008/spg10/spg10.jsp

RSA Conference
April 7-11
San Francisco, Calif.
www.rsaconference.com/2008/US/home.aspx

ASCDI Spring
April 9-12
Key West, Fla.
www.ascdi.com

ITEC Miami
April 16-17
Miami, Fla.
www.goitec.com

Houston SecureWorld Expo
April 23-24
Houston, Texas
www.secureworldexpo.com

Interop Las Vegas
April 27-May 2
Las Vegas, Nev.
www.interop.com

Atlanta SecureWorld Expo
April 29-30
Atlanta, Ga.
www.secureworldexpo.com

- MAY -

ITEC Houston
May 7-8
Houston, Texas
www.goitec.com

Philadelphia SecureWorld Expo
May 7-8
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www.gartner.com/it/page.jsp?id=597509

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PRODUCTS AT WORK

Environmental Monitoring Made Easy

USB-Based Device Provides Simple Solution To Costly Overheating

by Joseph Pasquini

• • •

ANYONE RESPONSIBLE for maintaining his company's information infrastructure—ranging from a remote network device in a broom closet to an array of servers housed in a fully equipped computer room—completely understands the need to closely monitor and control ambient temperature. Without the proper controls in place, the harsh reality is that no one usually notices that the air conditioning has gone out until expensive equipment starts failing and mission-critical services go offline. The need for temperature monitoring solutions, however, is not just limited to infrastructure environmentals. Such a monitoring capability can also be leveraged at an application level. This is exactly the kind of scenario that Terry Sprout, president of Agile Automation, needed to address during the development of a custom imaging software solution for one of his clients.

Sprout harnessed his expertise in imaging and systems automation to found Agile Automation about 11 years ago. "I started the company with the intent to provide off-the-shelf subsystems that can be reconfigured into many different automated systems," says Sprout. Recently, his company has been in the process of developing imaging software for a very sensitive camera designed for use within exceptionally dark environments. "Most end users (if not all) are research scientists trying to collect data never seen before by other systems," explains Sprout. "Many researchers work for universities, drug companies, and other high-tech companies trying to have an impact in tomorrow's society." Sprout adds that Agile Automation is also in the process of installing such a camera system on a submersible owned by renowned movie producer John Cameron for a future story slated to appear on the Discovery Channel.

Serendipity Strikes

One of Agile Automation's customers recently had a need to log vital temperature parameters present when capturing an image using the software application developed by Sprout. Specifically, the requirement was to log the date, time, and ambient temperature parameters present when the images were captured. The ambient temperature required for this application includes outdoor temperature ranges anywhere in the world. In order to record the data, however, it was immediately clear to Sprout that he would have to find and leverage some sort of low-cost sensor capable of meeting the customer's specifications. As fate would have it, someone else with a keen interest in cameras had developed just the solution.

TEMPERATURE@LERT®

Harry Schechter has been a leader in the IT sector for more than a decade. In addition to previously serving in management positions for several companies, including Doceus and later Anybill Financial Services, Schechter is also coincidentally a semiprofessional and published photographer. In 2005, Schechter founded Boston-based SchechterTech in order to develop products designed to simplify and automate IT management. SchechterTech's first product to market was Temperature@lert Standard. Originally intended to monitor server room environmental conditions, users promptly revealed a multitude of related applications for the USB-based sensor.

A Simple, Low-Cost Solution

As part of its preliminary investigation for a suitable solution, Agile Automation's client identified Temperature@lert (202/615-3950; www.temperaturealert.com) and mentioned its findings to Sprout. After conducting his own research into inexpensive precalibrated sensors that could be integrated into his imaging software process, Sprout quickly determined that Temperature@lert offered the best price point for both its -40 to 200 degrees Fahrenheit temperature range and its ±0.5 degrees Celsius minimum resolution. "This sensor has those ranges and resolution, can be integrated into our software, and all at a considerably lower cost," says Sprout.

Temperature@lert features a digital temperature sensor housed within a 3.5-inch hardy plastic enclosure. Sporting a form factor similar to many of the early memory sticks, the sensor can easily connect to any open USB port on a PC or server and runs as a Windows service. As the sensor's power is fed via its USB interface, no external power is required.

In addition to real-time temperature graphing, temperature statistics (date, time, and temperature) observed by the sensor are logged to text and XML log files using the included software. Units of degrees can be measured and recorded in either Celsius or Fahrenheit. Temperature@lert also automatically generates a graph of the current day's temperatures and places it within its log file directory. Additionally, a customizable alert message can be continuously emailed to a designee or sent just once when a temperature threshold has been triggered. Multiple email addresses, as well as SMTP authentication, are supported. Integration of temperature readings into Web-based content and other third-party applications—such as Sprout's custom imaging solution—is provided through Temperature@lert's support for XML.

Network managers will be pleased to learn that the SchechterTech sensor supports SNMP; workstation users concerned about operating in adverse ambient conditions will be interested in Temperature@lert's ability to initiate a PC shutdown.

A Custom, Yet Straightforward, Implementation

Due to the custom needs of his camera project, a not-so-subtle prerequisite for Sprout during his initial evaluation of temperature sensors was that any potential products offer an optional Software Developer's Kit. However, his research was unable to turn up any positive results. "I didn't want to, nor did I have the time to, build one myself," recalls Sprout. Liking the hardware capabilities of the Temperature@lert sensor, he decided to contact SchechterTech directly for guidance. "They had some documents that described the communication protocol, which they sent to me via email after I ordered the first device. The documentation was straightforward and also included some sample code written in C#."

Because Sprout develops software using C++, integrating the new hardware device into his custom software application turned out to be a quick and painless task. "This sensor was the easiest device I have ever integrated," he notes. Sprout goes on to explain that he likes to test baseline communications with a device using Microsoft HyperTerminal (www.microsoft.com) in order to reduce the number of unknown issues that might materialize during development. "This is a normal process whenever I integrate new hardware devices into my software. This helps reduce the number of variables that need testing if the device doesn't work with my software right away."

Sprout has previously integrated many serial-controlled devices with his imaging software. It was this bank of experience that allowed him to quickly proceed with incorporating the Temperature@lert sensor into his solution. "I took an easy module, copied it, stripped out everything specific to that device, and added the code necessary to communicate with the Temperature@lert device," says Sprout. It only took a few minor adjustments before he was able to get the sensor to properly behave with his freshly compiled code.

"I cannot recall any devices in the past that were this easy to integrate," says Sprout. "All my serial device modules have the ability to scan serial ports to detect whether the device is present. Once found, my software adds the device to a list of known devices and registers the serial port where it was found. If the device is not detected the next time, my software notifies the user so they can make sure it is connected and turned on (if necessary)."

To better respond to the needs of his clients, Sprout explains that he does not have a need to leverage the bundled software that ships with Temperature@lert. "I don't need their application since I can communicate directly with the device and do whatever I want, whenever I want," remarks Sprout. P

Temperature@lert

Provides temperature monitoring solutions for small to medium-sized enterprises

"I took an easy module, copied it, stripped out everything specific to that device, and added the code necessary to communicate with the Temperature@lert device. I cannot recall any devices in the past that were this easy to integrate," says Terry Sprout, president of Agile Automation.

(202) 615-3950
www.temperaturealert.com

STORAGE

FEBRUARY 1, 2008

Powerful Network Backup

Arkeia Adds Features For SMEs With Distributed Data & Remote Offices

YOU DON'T NEED TO spend a lot of time and money dealing with a complicated data manager. Arkeia Network Backup version 7.0 is a simplified, powerful enterprise-ready network backup and data protection solution for intricate and dispersed enterprises, such as those with remote branches.

With business packs available for small, medium-sized, and large networks, version 7.0 is designed to save time and money while enhancing backup performance and flexibility for distributed infrastructures.

Version 7.0 adds several new features:

Federated data protection architecture. Centralized management of various instances of Network Backup software is now offered with the new version 7.0. It manages remote office data and controls global backup and recovery policies.

Integration with EdgeFort appliances. This integration allows for deployment of hardware, software, and/or appliances from the data center to the remote branch.

arkeia Network Backup

New GUI. This Web 2.0-based user interface now includes online help and wizards, making the program easier to install, configure, and manage.

Enhanced virtual tape library. It now offers the highest level of granularity on how files, directories, and tapes are managed. Version 7.0 has also included integrated VTL for better disk-based backup structure and quicker backups and recovery. 1TB of disk capacity is included.

Extended platform. Version 7.0 has been expanded to support Novell OES 2, Mandriva 2008, Windows Server 2008, and Mac OS X Leopard on Intel.

Arkeia Network Backup version 7.0 includes other innovative data protection features, such as triple backup verification, automatic SCSI detection, and client-side encryption. Additionally, Version 7.0 is suited for enhancing SAN environments, and it offers just one solution for all platforms. Arkeia Network Backup version 7.0 supports open-source systems such as Linux, MySQL, PostgreSQL, Open-Xchange (including SLOX), and LDAP.

Arkeia Network Backup version 7.0

Starts at $800

Network backup solution that includes central management to enhance management and customizability, along with features to boost data protection for intricate and dispersed enterprises

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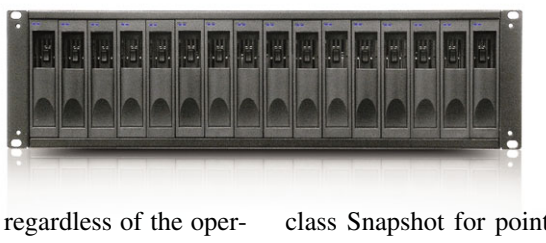
arkeia SOFTWARE

STORAGE JANUARY 18, 2008

Enhance Technology Adds To Its UltraStor RS Line

RS16 IP-4 Handles High-Impact, High-Volume Tasks

ENHANCE TECHNOLOGY'S RS16 IP-4, the newest member of the company's UltraStor RS Series of storage products, gives IT departments a host-independent, transparent, and driverless method for adding RAID (0, 1, 3, 5, 6)-protected storage to existing infrastructures, regardless of the operating system or hardware already in place.



Supporting Microsoft VSS and coming in a 3U, 16-disk modular rack design, the RS16 IP-4 offers such features as a built-in 64-bit RAID controller, up to 2GB of cache and 3Gbps SATA disks. Advanced features available via the RS232 interface include multiple array settings and SNMP and security options.

Constructed to handle high-volume and high-impact network storage tasks, including those related to video broadcasting and backup and recovery applications, the UltraStor RS16 IP-4 also includes an ability to let administrators configure the appliance in just minutes. Additionally, auto-configuration abilities are available via a rear-located LCD control panel, and remote Web browser-based management and monitoring are also possible. An included menu screen allows access to set up the RS16 IP-4's configurations, as well as change settings as storage needs change over time. Physical protection comes in the way of two included redundant, hot-swappable power supplies and two fans to guard against hardware-failure interruptions.

Beyond the quad Gigabit Ethernet ports, the RS16 IP-4 also includes N-Way Mirror and enterprise-class Snapshot for point-in-time recovery protection against accidental deletion of data. The appliance is suitable for Microsoft Exchange and SQL Server environments, as well as disk-to-disk backup, database pools, image acquisition, near-line storage, data centers, media and asset libraries, and shared SANs. Dynamic online RAID expansion is possible without total system downtime being required.

Enhance Technology UltraStor RS16 IP-4

$4,750

An intelligent iSCSI RAID system that includes a 64-bit RAID engine and up to 2GB of cache and supports 3Gbps SATA disks

(562) 777-3488

www.enhance-tech.com

ENHANCE TECHNOLOGY, INC. *Where Storage Begins*

PHYSICAL INFRASTRUCTURE JANUARY 18, 2008

CPS Automatic Power Cycle Keeps Equipment Online

New Device Automatically Power Cycles Frozen Devices



WHEN IT COMES TO appliances that control network traffic, ordinary monitoring tools aren't enough. Sure, the monitoring system alerts you to traffic disruptions, but the entire network remains down until you're able to reach the frozen router or modem and restart the power cycle. To speed up the process, CPS (Computer Peripheral Systems) offers the APC (Automatic Power Cycle) appliance, which monitors network status and automatically restarts power to a frozen device.

CPS built the APC unit with DHCP routers and modems in mind for plug and play applications, but customers can use the device to cycle power for any critical network component. The APC unit sits between the AC outlet and the selected devices. It regularly pings two IP addresses to confirm the network's Internet connection is functioning. When the APC determines a device has frozen (due to ping failure for both IP addresses), it recycles power to its AC OUT outlet for five seconds.

Customers can configure multiple APC unit features by connecting the device to a PC. The PC must run a terminal emulation program. You can change the primary and secondary ping addresses, enable or disable ping-out capabilities, adjust the ping interval from its 2-minute default, or extend the power-off countdown from the default five seconds up to 90 seconds and more.

The APC unit also supports out of band backup with its Ring Reboot feature. Customers can ring the APC device over a DSL or phone line to initiate a power reset. The APC device resets after six rings by default, but customers can change the ring number via the unit's serial connection.

The APC appliance is small and light. It has two AC receptacles (one IN, one OUT), one RJ-45 port, and three RJ-11 ports. The device also sports a Power/Reset button and a rocker for the 15-Amp circuit breaker, as well as status LEDs. The device supports 110VAC to 240VAC power inputs.

CPS Automatic Power Cycle

$179

Resets AC power to hung DSL routers, modems, and other devices

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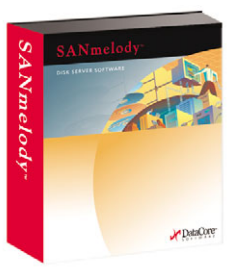
CPS Computer Peripheral Systems, Inc.

STORAGE JANUARY 25, 2008

Optimal Storage Support

DataCore Unveils VM Starter SAN Bundle For Upgraded Portability

MODERN ENTERPRISES OF all sizes are seeing an increasing need for storage virtualization as they continue to expand to virtual environments. DataCore's release of the feature-loaded, readily accessible VM Starter SAN package offers newly enhanced data management capabilities for SMEs. This cost-effective SAN provides simplicity for any VM (virtual machine) yet runs efficiently on physical hardware.



Storage networking is now more convenient with the iSCSI-enabled VM Starter SAN package, capable of asynchronous IP mirroring and virtual disk emulation. The portability of the VM Starter SAN highlights its functional consolidation of virtual storage: The single server bundles allow for mobile protection of multiple VM environments.

The integrated SANmelody features make data migration (via SANmotion) an easy delivery task for the user due to real-time repurposing. Old information can be placed elsewhere in the system, while primary data is allowed to occupy disk resource space for optimal utilization. Disk backup is simplified through the high-speed snapshot feature in which consolidated volumes are copied at one location rather than from multiple points.

DataCore's remote site recovery feature allows for maximum enterprise support through dual bundle operation. The simplified bundles demonstrate the advantages of high-performance mobile VM SANs. For integrated systems relying on the portable Starter SAN, DataCore recommends that businesses use two bundles in order to provide moment-to-moment location continuity. One SANmelody package remains onsite, while a second occupies the remote location. The Starter SAN can also function effectively as a single system and provide equally operative storage recovery.

DataCore's VM Starter SAN supports all major virtual machine vendors, such as Citrix, Oracle, Sun, VMware, and Microsoft. Additionally, the Starter SAN can run on Linux, Mac OS, and Netware, as well as Microsoft and Unix.

According to DataCore, the VM Starter SAN is cost-effective because it fills the spot in the market between smaller data protection systems and large-scale, high-priced platforms. It can provide broad system security, so the internal stability of your business won't be jeopardized.

DataCore VM Starter SAN

About $4,000 per SAN server

Portable SAN bundle featuring auto-allocating storage support, enhanced data migration, and remote site disaster backup

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www.datacore.com

DataCore™ SOFTWARE

STORAGE FEBRUARY 1, 2008

RAID 6 For Maximum Data Protection

Winchester Systems' FlashDisk SX-2302S Offers Up To 60TB Of Storage



WHEN YOU'RE DEALING with massive amounts of storage, a RAID 6 setup is ideal because your disk array can survive two drive failures, and it provides an added layer of protection when rebuilding a drive. The FlashDisk SX-2302S from Winchester Systems is a SAS hosted disk array with dual-parity RAID 6 to offer maximum data protection.

The FlashDisk SX-2302S includes dual hardware ASICs (one for each of the independent parity calculations in RAID 6), so the SX-2302S offers RAID 6 performance similar to what you would see in a disk array that uses RAID 5. According to Winchester, RAID 6 dual parity offers 500 to 30,000 times longer mean time to data loss than RAID 5. The FlashDisk SX-2302S delivers a 1,150MBps sustained throughput and more than 78,000 disk I/O operations per second while maintaining mirrored cache for controller failover. The speedy ASIC hardware ensures successful disk rebuilds after a failure.

The 2U base unit comes with a single RAID controller and 12 high-capacity disks, and you can add four 2U expansion shelves—each with 12 drives—to expand the FlashDisk SX-2302S to 60TB when using 1TB drives. You can fit up to 252TB of storage into a 42U rack, making the SX-2302S ideal for enterprises with high-capacity needs. The SX-2302S also features two SAS 4X wide host ports for multihost connectivity without the costs of implementing a Fibre Channel infrastructure.

The FlashDisk SX-2302S supports full-featured protection in RAID 0, 1, 3, 5, 6, 1+0, 15, 16, 30, 50, and 60. It comes with 512MB of cache memory, upgradeable to 2GB of cache memory per controller. The FlashDisk SX-2300 line also provides real-time remote monitoring, automatic drive failure detection, failed drive rebuild, hot-swap drive capability, and online expansion. The base unit's nonvolatile cache uses a Li-Ion battery that works for a minimum of 72 hours, and it features dual hot-swap, redundant 460/530-watt power supplies.

Winchester Systems FlashDisk SX-2302S

Starts at about $16,000

A SAS hosted SATA disk array with RAID 6 that can expand to a storage capacity of 60TB with 1TB drives

(781) 265-0200

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WINCHESTERSYSTEMS® *Storage Without Complexity*

STORAGE FEBRUARY 1, 2008

Dell AX4-5: Simple, Scalable Storage

SAN Array Offers Affordable, Easy-To-Use Features



AS SMES GROW, they add branches and remote offices, which increase the need for data storage without spending more of the IT budget. The storage therefore must be simple to deploy and easy to manage. To meet the need for entry-level storage for small and medium-sized enterprises, Dell has released the AX4-5 series of SANs.

Data on the AX4-5 is designed to be protected anywhere—in the controller, on the drive, or on the data path. Further reliability is provided through continuous background disk consistency checking; mirrored cache; and cache destaging, which means in the event of a failure, data stored in cache can be moved to disk, protecting against loss or corruption. Deployment and operation are designed for simplicity with the EMC Navisphere Express user interface. For users with multiple EMC arrays, this software offers a "single pane of glass" type of management in addition to data replication and migration tools.

Scalability and flexibility are crucial to the data storage solution of any SME, which is why the Dell AX4-5 is designed with scalable architecture and multiple drive options. The AX4-5 supports up to 60 drives on 64 hosts (which requires five enclosures), and with the EMC Navisphere Express, a user can add additional storage to the array in a short amount of time. Users can start with four drives and continue adding as greater storage needs arise. Supported servers include PowerEdge and PowerVault storage technologies.

The arrays support both Fibre Channel for 4GB architecture and iSCSI for IP networks, as well as SAS and SATA drives. This allows for tiered storage as users have the option of mixing drives to support high-performance needs, such as I/O applications, while using SATA drives for cost-effective storage. As needs arise, the AX4-5 series is designed to migrate data seamlessly and easily between different types of drives and RAID types.

Dell AX4-5

Starts at $15,699

A storage array that supports up to 64 hosts and up to 60 drives across five enclosures

(800) 915-3355

www.dell.com

PHYSICAL INFRASTRUCTURE FEBRUARY 8, 2008

Access At The Rack

Chatsworth's LCD/KVM Console Provides Easy Access To Up To 16 Computers



AS A BUSINESS GROWS, IT resources must grow, too. By adding additional computers and other hardware, however, space tends to become more constrained. To help companies save valuable rack space without sacrificing functionality, Chatsworth Products created the new LCD/KVM Console. This console provides easy access to multiple rackmount peripherals, and it requires only 1RMU of rackmount space.

Chatsworth's LCD/KVM Console comes in single-, 8-, or 16-port versions and provides access to multiple computers using a set of rackmount peripherals. Multicomputer units come with a KVM switch. The console comes with a 15-, 17-, or 19-inch LCD capable of displaying resolutions of up to 1,280 x 1,024 SXGA. A tempered glass panel protects the display.

This 19-inch EIA rackmount shelf combines the LCD panel, a 106-key keyboard with numeric pad, and a built-in touchpad. The LCD/KVM Console connects to computers with PS/2 or USB keyboard and mouse connections using a single cable connection. Supported OSes include DOS, Windows, HP Unix, Linux, Novel 3.12-6, and Sun.

For increased ease of use and manageability, the Chatsworth console has built-in dual slides that let the LCD and the keyboard tray open independently. A keyed lock secures the console in the closed position when not in use. The KVM switch offers an on-screen display menu and password protection. With the KVM switch, users can search for computers by name or by using hotkey controls such as auto scan.

The console comes with an internal universal power supply with a connector for international use and a power cord with NEMA 5-15P plug.

Chatsworth Products LCD/KVM Console

Starts at about $2,085

Combines an LCD, a 106-key keyboard, and a touchpad into a single unit that can connect up to 16 computers

(800) 834-4969

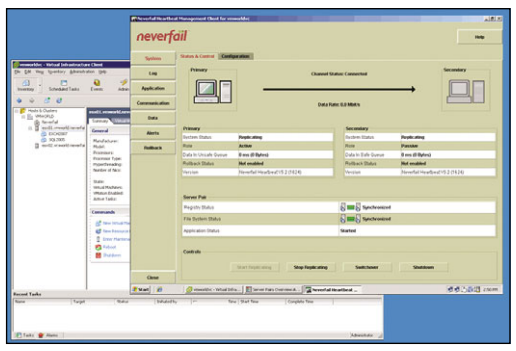
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CHATSWORTH PRODUCTS, INC.

NETWORKING & VPN FEBRUARY 8, 2008

Neverfail Protects VMware Infrastructure

Monitor & Clone Your VMware VirtualCenter Server



Neverfail for VMware VirtualCenter duplicates your VMware VirtualCenter server and proactively monitors server health.

TO HELP ENSURE IT STAFF won't lose key VMware VirtualCenter services, Neverfail for VMware VirtualCenter clones and continuously replicates the VMware VirtualCenter server's configuration settings, data, and SQL Server databases onto a secondary server.

If any major issues arise with either the VMware VirtualCenter server or connected hardware, the Neverfail software automatically fails over VMware VirtualCenter to the secondary server with the cloned VMware VirtualCenter data. Neverfail also maintains connectivity to the primary server until the outage can be resolved, so IT admins can continue to use the VirtualCenter management features with up-to-date data.

Neverfail for VMware VirtualCenter checks the health of the management server software, the hardware for the VirtualCenter server and associated components (such as License Server), the network infrastructure, and the OS. In some cases, the software may simply alert IT staff to a problem, while more serious issues cause automatic failover. If Neverfail switches to the secondary server, IT staff can continue to use the features of the VMware VirtualCenter without problems, so end users won't lose access to apps and IT staff won't lose VirtualCenter's management or control operations.

Neverfail For VMware VirtualCenter

Starts at $10,000 per pair of servers

Software that monitors and clones the VMware VirtualCenter server to ensure IT staff can use the management and control tools of the VMware VirtualCenter

(512) 327-5777

www.neverfailgroup.com

neverfail WWW.NEVERFAILGROUP.COM PREDICT · PROTECT · PERFORM

NETWORKING & VPN FEBRUARY 8, 2008

Give Users More Control

Ensim Unify Enterprise Edition 1.5 Improves System Management Routines

SOMETIMES THE BEST WAY to increase the productivity of employees is to give those employees self-service tools that offer more administrative rights for basic tasks, such as managing distribution lists and resetting passwords.



Ensim's Web-based Quick-Start Wizard walks users through multiple configurations settings.

Ensim's Unify Enterprise 1.5 system management software provides such capabilities. It lets enterprises quickly perform change requests within a unified communications infrastructure and automate the provisioning of users, applications, and devices, all of which results in reduced errors and administrative costs, the quicker turnaround of setting up new users.

This upgrade of Unify Enterprise supports Windows Mobile and BlackBerry devices and Microsoft Active Directory 2003, Microsoft Exchange 2003/2007, and BlackBerry Enterprise Server.

The template-based interface and Web-based Quick-Start Wizard walk administrators through post-installation configuration and walk employees through self-configuration options. Edition 1.5 also lets administrators set default groups for users; lock down user templates; manage user attributes; and transfer user accounts.

Additional features include a Web-based interface that offers customization and management control over administration rights based on each administrator's role. Systems admins can configure the software based on business policies. Edition 1.5 also includes an enhanced Web services API to execute integration with current systems.

Unify Enterprise Edition 1.5

$20 per user annually (maintenance included); $39 perpetual license (maintenance separate); free trial available.

System management software that features a quick-start configuration wizard, enhanced Web services API, and template-based interface

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Streamline Your Storage

Find The Top Storage & Data Retention Best Practices For Your SME

by Elizabeth Millard

• • •

Every data center has different requirements in terms of storage, security, power, cooling, and other issues. But many times, there are best practices that can be employed at small to midsized enterprises of any configuration. In terms of storage, there are fundamentals that can address security, efficiency, and larger business need. Here's what the experts see as some crackerjack ways to streamline a data center's storage.

Implement A Tiered Storage System

Not all data is created equal—or, more accurately, is valued equally. Some client PowerPoint presentations, for example, aren't as crucial to put into long-term storage as departmental financial statements or customer records. In general, a tiered storage system puts a level of importance on each piece of data but also considers the cost of recovery and data loss.

According to Chris Lueth, product engineer and best practice whitepaper author at Network Appliance (800/206-5363; www.netapp.com), there are two primary considerations necessary to establish the correct storage tier level. The first is how long it takes to resume operations in the event of an outage, Lueth notes, and the other is what amount of data loss is acceptable.

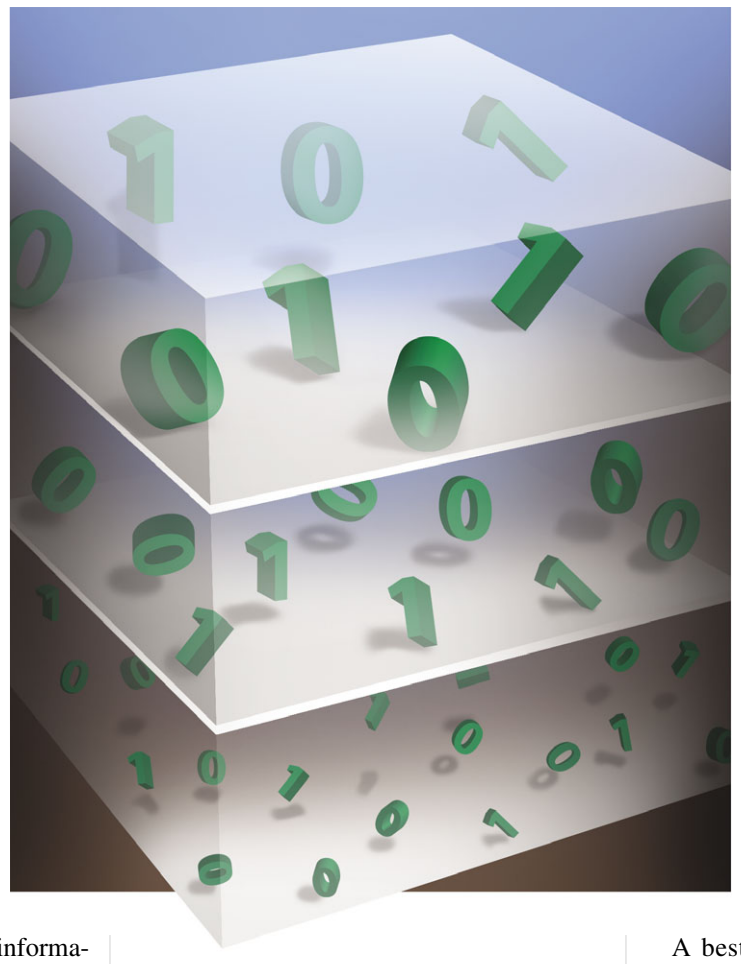
Reducing the impact of either situation will increase overall storage costs, so in examining these considerations, an SME can establish the business value of each data class. Lueth adds that this process will probably involve some trade-offs with availability and an acceptable amount of lost data.

Understand The Cyclical Nature Of Data Importance

Also vital to note is how the value of information fluctuates over time, notes Ken Steinhardt, EMC's (www.emc.com) CTO of customer operations. The value doesn't start at a high level and gradually become unnecessary, he says; instead, most data tends to become less important and then goes back to being crucial at some point.

"It's not one big lump of digital information but, instead, a series of pieces that each have their own life cycle," he says. Because of that, implementing an ILM (information lifecycle management) strategy is a good best practice.

As part of ILM, Steinhardt adds, different data types can be stored on different types of disks, tying ILM into the tiered storage strategy. Mission-critical data can be placed on more expensive media, while midspeed and midcost suffice for everyday data, and lower-speed media can be used for reference data. As the value of each piece of data changes, it can be ported over between different storage types.



One best practice in creating tiered storage and assigning value is to work with vendors, Steinhardt notes: "Good vendors are well aware that customers don't want to be locked into a proprietary system, and so they'll work with an SME to create a multivendor environment that includes recommendations on ILM strategies, remote recovery, offsite backup, and other strategies."

Most data tends to become less important and then goes back to being crucial at some point.

Jettison Older Data Or Don't Store Some Data At All

In line with assigning different levels of importance to each data piece is recognition of the fact that some data doesn't have to be stored at all.

"Some companies, especially SMEs, might feel that they have to store data just for the sake of it, without the understanding of who's accessing the information and why you're keeping it," says Hossein ZiaShakeri, senior vice president of strategic marketing and business development at Spectra Logic (www.spectralogic.com).

One best practice is to first look at regulations and compliance surrounding Sarbanes-Oxley and other mandates and then examine what's left over that doesn't require storage as part of those directives.

Many times, SMEs believe that simply keeping all data is the easiest approach, says ZiaShakeri, but over time, it creates a glut of data that's unnecessary and forces the IT department to wade through different data stores when setting up new systems.

Focus On Scalability & Interoperability

Although it would be helpful for a data center to remain a static environment for a few years, necessitating no upgrades, changes, or equipment swapouts, the fact is that data centers are constantly tweaking hardware and software choices in order to achieve greater efficiency.

Storage is no exception, notes Praveen Asthana, director of storage for Dell (www.dell.com), but some SMEs do tend to see their storage hardware and applications as a concrete foundation rather than a system in flux. "Scalability is vital, and that means bringing in a number of components," says Asthana. "The more inflexible your storage strategy is, the greater the chance of interoperability issues and reduced scalability."

A best practice in this area is to again work with vendors, but this time with a critical eye toward what they're offering. Asthana notes that many vendors claim they can grow as the company does, but that's sometimes not true, given the chances of changing regulations, increasing use of data, and quick SME growth.

"SMEs should use hardware vendors that have several software partners and can create a system with multiple components that's customizable," says Asthana. More components tend to create better scalability because they can be swapped out or expanded, rather than having to replace an entire data storage system when the company begins to outgrow it.

"You have to be able to take down parts of the system," says Asthana. "Being more scalable avoids dismantling and rebuilding anything, which always tends to be expensive."

New Technologies To Watch For

HP EVA4400. Late last month, HP (www.hp.com) upgraded its best-selling Fibre Channel SAN disk array. The notable aspect of the EVA4400 (Enterprise Virtual Array) is that HP claims it can be installed and run by employees with a certain level of IT savvy, rather than by storage experts, which means it would work well at branch offices and cut down on IT support time spent shuttling out to another location. The upgrade gives the disk array more capacity and virtualization features and is even priced lower than in the past.

MetaSDRAM. Start-up company MetaRAM (www.metaram.com) recently announced the unveiling of MetaSDRAM, which adds memory capacity to workstations and servers without bumping up system costs significantly. The technology depends on a new type of chipset that allows manufacturers to double or even quadruple capacity without making radical changes to a motherboard. Because existing motherboards can be used, the capacity addition costs should be minimal, the company believes.

Compellent Storage Center 4.0. An upgrade to Compellent's (www.compellent.com) networked storage system allows data center managers to automate tiered storage within every drive, with the system finding and using every available bit of space within storage volumes and application servers. Automation can be a beautiful thing, and SMEs are likely to be intrigued by the system's features, such as data conversion, speedy access to information, and application optimizer.

Cost-Effective Disk Arrays

HP StorageWorks MSA2000 Family Boosts Administrative Capabilities

Virtualized server environments need increasingly centralized storage to maintain network efficiency and reduce costs. HP is offering a new option featuring low-cost data security: the StorageWorks MSA2000 (Modular Smart Array). This collection of enterprise-class disk arrays is economical yet optimal for expanding disk functionality.



Entry-level SANs are moving toward enhanced availability, so storage capabilities must expand. The MSA2000 arrays are powerful, with four times the bandwidth of previous MSA generations. The StorageWorks family offers the MSA2000i (1Gb iSCSI) and the MSA2000fc (4Gb Fibre Channel); both can run on single or dual controller models. Each array is capable of scaling up to 36TB of storage.

Although the MSA2000 is constructed for use within SMEs, companies can use the storage system for secondary locations and remote backup. Users can deploy the MSA2000 on multiple applications along with SAS or SATA drives.

With the MSA2000, application processes occur faster to guarantee system accessibility. Business communication downtime is reduced thanks to updated redundancy tools. The MSA2000 provides Snapshot and Clone software to protect enterprise data and prevent business downtime through rapid recovery services.

The MSA2000 complements HP BladeSystem customers' existing environment. Users can execute compound blade configurations vs. a single blade at a time. IT can supplement file services for the MSA2000 with ProLiant Storage Servers or StorageWorks EFS Clustered Gateway.

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Make The Most Of Your Cooling

Continued from Page 1

leaking between racks, under floors, or into cold areas where it isn't wanted. Although this may seem to be obvious, the importance isn't always understood. "One customer asked, 'If I have cool air coming through holes in the floor instead of perforated tiles, what's the difference?' You want to drive cold air through hot electronics to cool them down. If the cold air is going around them, [it is mixing with hot air and not effectively targeting the electronics]," Birch says. "Cold air should be directed where it is most needed."

"You can close up spaces so that you have [hot and cold aisles] using blanking panels, as well as by just connecting racks tightly together," says Fred Stack, vice president of marketing at Liebert Precision Cooling (614/825-1794; www.liebert.com). "It doesn't have to be something fancy. I've seen people use cardboard to seal gaps between racks to create blanking panels between spaces to prove they can solve the problem before they spend a lot of money on fancy approaches."

New Technologies To Watch For

Virtualization. Virtualization is the technique of making a single physical server act like several servers, says Eric Birch, vice president of Degree Controls (www.degreec.com). He reports a success story where one customer has 30 servers doing the virtual work of 300 servers. Virtualization can reduce the total amount of cooling required because the work of many servers can be consolidated onto a smaller number of devices.

Passive cooling. Bob Moore, group marketing manager in HP's (www.hp.com) Industry Standard Servers Group, and Rick Hayes, principal consultant at Glass House Technologies (www.glasshouse.com), both referred to racks that provide passive cooling as a means of increasing cooling efficiency. While active cooling uses a fan or blower to move cool air into or suck warm air out of a rack, passive cooling does not require a fan. A passive cooling design allows the warm air to naturally rise and then directs it away from the warm racks. One approach is to use a rack that routes the hot air out the top rear of the cabinet and out into a drop ceiling, from which the hot air is drawn out.

UPS systems. Another useful technology to watch for is new UPS systems. "If you have an old UPS that is only 85% efficient, you realize that this means 15% is dissipated as heat," says Kris Domich, principal consultant of data centers and storage at Dimension Data (www.dimensiondata.com). More efficient UPSes produce less heat, thus requiring less cooling. In some places, Domich notes, "we've implemented new UPSes and seen the power bill go down under some loads."

Water cooling. Another technology of increasing importance uses the building's cold water supply to help cool the racks, Domich continues. "The use of water cooling is becoming a lot more commonplace." Running the water in the facility's cold water lines through the data center's cooling system makes use of already cold water and reduces the amount of refrigeration needed to keep a data center cool.

Make The Best Use Of The Hot & Cold Air Within (& Outside) The Data Center

Tuan Hoang, project engineer at Lee Technologies (www.leetechnologies.com), points out that air-conditioning systems in data centers work "better and more efficiently if you raise the return temperature." This is done by directing the hot air from the back of the racks to the air-conditioning system's return coils. "If you have 80- to 85-degree return air, the system runs more efficiently than if you had it at 70 to 75 degrees. In chilled-water systems, this can be increased to 90 degrees," Hoang says. Locating the CRAC (computer room air conditioning) units near the end of hot aisles was also recommended in "Best Practices for Datacom Facility Energy Efficiency," which was published last month by ASHRAE (the American Society of Heating, Refrigeration, and Air Conditioning Engineers).

Somewhat more controversial, but a means to make better use of the heating and cooling in a data center and the building housing it, is enabling the data center system to interchange air with the building air when appropriate. For example, on cold days, the excess hot air can be circulated into areas of the building that would otherwise get air from the building's heating systems. Similarly, cool air from outside can be brought into the data center, reducing the need for running cooling equipment during those periods. Dampers can redirect the flow so that the data center's cooling is managed entirely by the CRAC system when air exchange with the rest of the building is not necessary. This is an approach that is just beginning to see implementation.

Get Facilities Involved In Data Center Planning

The issue of power density is one that is of critical importance. In the past, the limiting factor in a data center was probably the physical size of a data center. Today, however, it's just as likely to be that the data center has run out of power.

> **"Amps equate to BTUs. You can't do a cooling estimate without a power estimate."**
>
> *-GlassHouse Technologies' Rick Hayes*

"Systems are having a much deeper impact on the facilities aspect of data centers than they had five to seven years ago," Dimension Data's Domich says. "A lot of companies are finding that equipment procured or being staged doesn't have a place in the data center for power and cooling. Having a communication path between the IT shops and the (facilities) management personnel will allow companies to have a better idea of the long-term growth of the data center." P

Safeguard Your Corporate Laptops

Continued from Page 1

secure use of notebook computers outside office facilities. Take advantage of readily available industry best practices, develop a notebook security policy, and take a proactive approach to educating employees." Haidri says this should be coming from IT, with executive-level endorsement.

Jason Roberts, marketing manager at PC Guardian (www.pcguardian.com), agrees that end-user education is very important. He says, "Never assume end users will remember all your policies. Put up posters, conduct security classes, give travelers a pretrip checklist on key security procedures to follow. Reinforce your policies at least yearly by conducting 60-minute security trainings. Alternatively, reserve 15 minutes each quarter in department meetings to give security updates on details of the latest theft in the news and how it could have been avoided, the latest viruses to look out for, etc." Roberts says it is important to run occasional compliance spot checks and report your findings (both positive and negative) to supervisors.

Best ROI: Affordable Encryption

One safeguarding solution that is easy on the pocketbook is to compress files on a hard drive and encrypt them during the compression process. Compression utilities such as WinZip (www.winzip.com) include encryption capabilities that prevent compressed files from being accessed without an encryption key. This solution is most ideal when you are working with archived files and large files.

Roberts says to make sure that an acceptable use policy is also in place. He notes, "Write up a policy on how end users need to take care of their computers both inside and outside the office. Review it with them and have them sign it, agreeing to adhere to the policy. Get endorsement from the appropriate vice president or company president with a cover letter to the policy to reinforce it further. Some companies even charge the employee for the lost or stolen computer if it's found they didn't stay within the rules—a strong incentive to comply."

> **Don't forget about setting up a BIOS-based password on your notebook and setting up a Windows user password.**

Lock It Down

Like deterring any other kind of property crime, Haidri says the most obvious yet frequently overlooked practice SMEs can do to prevent notebook theft is diligently safeguarding the physical security of their laptops. He notes, "Among the most common reported scenarios we see is the theft of notebooks left in plain view on car seats. Lock your notebook in the trunk if you must leave it in the car and use a cable lock while you're seated at a desk."

Roberts says that most computers are stolen from cars, airports, and hotel rooms. Because of this, he says one way to physically deter theft is to apply a tamper-resistant asset tag or actually engrave the machine. He says, "It could deter some thieves but could also aid in recovery if the computer is stolen. Issue computer locks to lock down computers whenever they are unattended. While traveling, store computers in a nondescript carrying case so as not to draw unwanted attention. When leaving a laptop in a car, lock the computer in the trunk plus use a cable lock to secure it to a permanent vehicle mount." Roberts adds that when you are in the office, lock down all computers to guard against break-ins or the more disturbing "inside jobs."

Haidri says knowing where your notebooks are is more than half the battle for IT departments in SMEs who often do not have an enterprise-caliber IT asset management system. "Even if they do have a system in place," he says, "IT asset management systems are designed to track only those computers that are bolted to office desks—not out in the field. New Internet-based IT asset management products have changed all this. Take advantage of these reasonably priced systems to track notebooks, who is using them, and what is installed, regardless of location."

Roberts adds that it's also important to make sure your end users are using complex passwords to thwart novice hackers. (Include this in the acceptable use policy.) He says, "For added protection, consider installing whole-disk encryption software to keep the thieves from accessing valuable corporate data on the machine or on the company network. Consider software that, once the stolen laptop is online, allows a computer to phone home for recovery by professionals or install disk wipe software that wipes the hard drive clean."

Act Now

Roberts says if a theft occurs, report it immediately. He notes, "Time is of the essence to keep thieves from intruding on the company network. Have a plan in place that has a step-by-step approach to address all the issues involved with a data breach. By preparing for the worst, you can minimize your financial exposure."

Best Tip: Highest Level Of Security

Hard drive encryption is one of the best ways to lock down your laptop. When you encrypt the entire hard drive, the encryption software causes the data to become undecipherable to unauthorized users. Most encryption software lets end users work, uninterrupted, while the encryption and decryption is done on demand. Some encryption software will also encrypt USB storage devices, external hard drives, and SD cards.

So what do you do if a notebook goes missing? Haidri says several products are designed to help locate and recover lost or stolen computers. "Talk to your computer manufacturer for their recommendations on the product that best suits your particular computer population," he says. "The best products come complete with a recovery guarantee and utilize relationships with local police forces to find missing computers and prosecute thieves."

Don't forget about setting up a BIOS-based password on your notebook and setting up a Windows user password. While neither of these methods is foolproof, they are already on your notebook and easy to implement. And wireless security (a whole other laptop security issue) is very important in places such as airports and hotels. P

Know Your Network

Experts Deliver Best Practices For Network Management & Monitoring

by Christian Perry

• • •

At the heart of any small or midsized enterprise is the network, which pumps life into every critical business element. The health of that network is tied directly to the bottom line, especially as businesses increasingly rely on it for communications both inside and outside of the organization. Naturally, the need to keep close watch over the network is paramount in today's IT environment.

"As networks have become more integral to the success of SMBs, costs associated with deploying those networks have become significant," says Cam Cullen, director of Americas' product management for Allot Communications (www.allot.com). "Simply adding more infrastructure to keep up with increasing network utilization is no longer a cost-effective solution."

Instead, companies must turn to intelligent management and monitoring to effectively control their network infrastructures and in turn keep their businesses running smoothly. The following advice details the best procedures for acquiring and using these technologies.

Buy Products That Can Grow With You

There are boatloads of network monitoring and management products available to SMEs, but only some products are right for each company. Thomas Stocking, co-founder of GroundWork Open Source (www.groundworkopensource.com), says that SMEs should select a monitoring platform that can grow as they grow, is flexible, and isn't overly big or expensive.

"Selecting the right solution is of critical importance, both in the short- and long-term, as your choice of monitoring solution will be the foundation upon which multiple layers of IT management will be built," Stocking says.

He recommends avoiding products that use per-node pricing, as this could cause problems in the future as a company grows and adds to its infrastructure. Further, don't buy too heavily into a product simply because the vendor claims it's easy to install—more important is extensibility and the ability to customize it, which both will help more in the long haul. Finally, Stocking says that the chosen product should be multiplatform-capable. "You may be a one-platform shop now, but you can't guarantee you will be in the future," he says.

Align Your Network With Business Practices

Smart companies recognize the importance of aligning IT with business, but the actual process of performing that alignment often creates seemingly insurmountable challenges. However, a network that's effectively tied into business processes can help ease that process. Vladimir Vinogradsky, president and CEO of Alloy Software (www.alloy-software.com), explains that it's wise to establish performance monitoring focused on the effectiveness of business processes.

"Essentially, IT operations should be viewed as an integral part of the business, and the monitoring technology should support the model of business operations," Vinogradsky says. "For example, basic monitoring of an email server may involve measurements of ping timings; however, network performance in this case won't be able to detect the issues with the mail application taking too much time to open a mailbox."

This tie-in to business operations becomes even more crucial when considering that network issues in small business environments can easily disrupt multiple business services at the same time. "This is why proactive management is critical. In fact, network management is directly related to IT service delivery, which recently has been recognized as one of the most important factors of business process and operations, and business contingency as a whole," Vinogradsky says.

Be Sure To Monitor

According to Cullen, administrators should differentiate capacity problems from utilization problems. Regular monitoring of patterns can pinpoint the cause of network traffic issues that arise amid user complaints of slow application response times.

For example, the monitoring can help determine whether those complaints reflect limited capacity (in turn spawning a need for higher-speed connections throughout the organization) or suboptimal network utilization (which could signal a need for more available bandwidth during those times for the applications in question).

"Capacity problems typically require additional resource investments, while network policy management can often be used to reallocate underutilized bandwidth to alleviate critical bottlenecks," Cullen says.

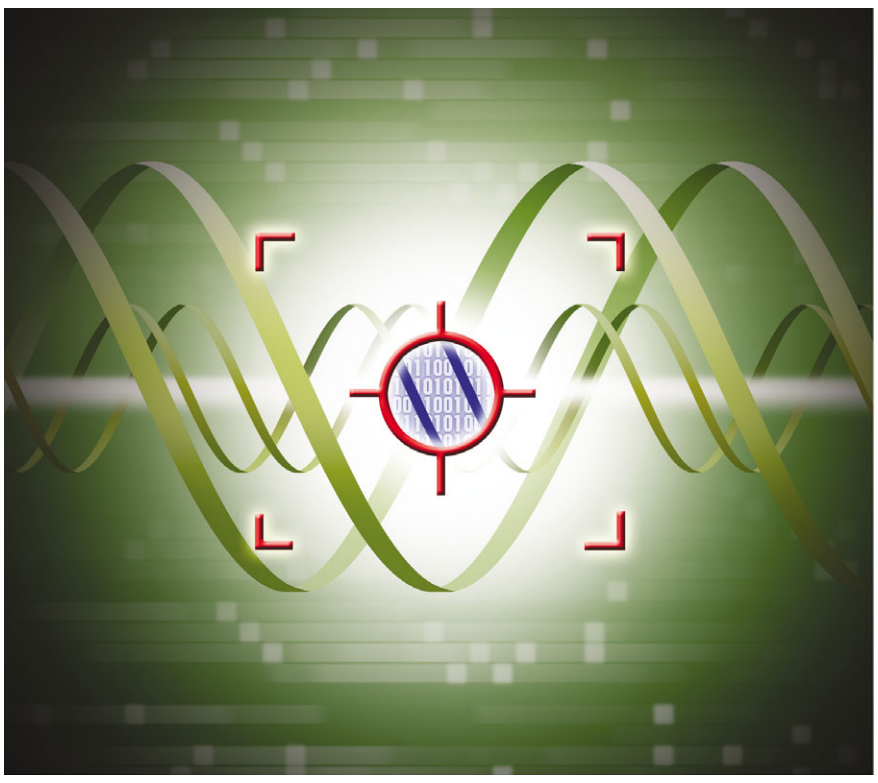
Have The Right Tools

By its very nature, network management can entail a wealth of information so deep that overly complex solutions can easily defeat their intended purpose, especially in SME environments. "In many instances, we see high-end traffic control and management systems lying unused in smaller organizations because they are just too complex for IT administrators with small staffs and heavy workloads," says Kevin Rowett, CTO of GigaFin Networks (www.gigafin.com).

Rowett explains that SMEs need tools that are task-oriented, rather than those that go heavy on numbers, statistics, and graphs. For example, administrators should have the ability to immediately find the source of an overloaded network, and Rowett says that deviation from the baseline benchmark is the starting point from which administrators can work.

He also suggests using a product that delivers visibility into traffic patterns over the entire network and allows control or blocking of usage at a granular level. Companies might discover that many diagnostic tools allow users only to view bandwidth utilization per link, he says.

Cullen adds that monitoring and management should be kept as simple as possible. "The best management scheme in the world is useless if it's not used," Cullen says. "SMB network management often has limited technical support staff. Management systems which are highly graphical and offer easy-to-use monitoring, reporting, and policy control capabilities are more likely to be utilized regularly in this market." P



SMEs should select a monitoring platform that can grow as they grow, is flexible, and isn't overly big or expensive.

New Technologies To Watch For

Deep-packet inspection. Gaining more detailed network analysis results can be useful, and Cam Cullen, director of Americas' product management for Allot Communications (www.allot.com), says that deep-packet inspection trumps typical switch/router management schemes by analyzing the packet payload, as well as the packet header. "This information can be used to implement management policies that fine-tune bandwidth utilization to improve application response time and control costs," he says.

Connectivity. According to Thomas Stocking, co-founder of GroundWork Open Source (www.groundworkopensource.com), the connections between the physical and logical are growing more complex with the introduction of virtual machines, grids, clusters, multicore CPUs, and other technologies. "Connectivity is becoming a multipronged affair, with Wi-Fi, Bluetooth, and, soon, WiMAX all offering multiple routes to the network," he says. "Monitoring and management technologies will need to account for all of this by doing more with custom objects and meta-definitions that you can define to suit your needs."

Protected Web Apps

nCircle's WebApp360 Stops Security Leaks

Every company knows that protecting the information of its customers is vital. But putting that protection into place and making sure it works is no mean feat. But thanks to the nCircle Network Security WebApp360, an add-on for nCircle's appliance-based IP360 offering, users can rest assured that their enterprise Web applications and any supporting infrastructure components are being scanned like clockwork.

WebApp360 is a comprehensive risk assessment tool that hunts down weaknesses found in Web applications, supporting Web servers, OSes, services, protocols, the network infrastructure, and adjacent software systems. When any aspect of the system involved in supporting Web applications gets updated or upgraded, undergoes a code change, or experiences a failure, WebApp360 will let you know so you can take the steps necessary to prevent a breach. Furthermore, as a software component of nCircle's appliance-based offerings, WebApp360 doesn't require any significant deployment or maintenance costs.

WebApp360's interface delivers a comprehensive view of the state of the network. On the Host Details screen, users can browse the Scan History and view the vulnerabilities in a column on the left side and the Web applications on the right. WebApp360 detects and blocks dozens of potential attacks, including Cross-Site Scripting, basic SQL injection, HTML tag insertion, URL insertion, invalid input, plain-text password submission, and password field AutoComplete attacks.

WebApp360's features include continuous real-time Web application assessments, security risk analysis, a scalable architecture that supports up to an unlimited number of users, normalized risk scoring, extensive reporting capabilities via the IP360 appliance, and instant install on the IP360 appliance.

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Not Another Security Tool

Vulnerability Management Reduces Risk, But You Have To Adopt It Correctly

by Drew Robb

• • •

First you needed antivirus. But that wasn't enough. Then you were told you had to add firewalls, antispyware, popup blockers, fraud prevention, and IDS (intrusion detection systems).

Well, now it's time for yet another security tool. Vulnerability management is all about checking out the possible risks that might exist in the current environment. It detects such things as software patches that haven't been applied, possible avenues of attack, and other potential threats.

"Vulnerability management looks at the vulnerability aspect of risk," said Michael Montecillo, an analyst at Enterprise Management Associates (www.enterprisemanagement.com). "Viruses come in where you are vulnerable. The idea is to lower risk by addressing existing areas of possible attack."

Vulnerability management, then, is the continual process of measuring and managing the risk presented by flaws in software and configuration within an organization. According to Tim Erlin, principal product manager for nCircle (www.ncircle.com), the process generally includes comprehensive discovery and profiling of network assets, assessment of each asset for applications and vulnerabilities within those applications, prioritization of the assets and vulnerabilities, and workflow for remediation of the prioritized conditions.

Start With The Right Tool

The right tool can function as a catalyst for vulnerability management practices in any company. To make it easier for companies to implement it, the best tools actually do an automatic assessment of your environment to identify threats.

"nCircle, Qualys, eEye, and others provide tools which simplify the vulnerability management process, create reports, and make it easy to do multiple assessments," says Montecillo. "It's best to adopt a process that is quick, repeatable, and doesn't take a lot of resources."

In addition, the breadth of the tool deployed is important. Some products, for example, provide one piece of the vulnerability management process—perhaps they assess only network vulnerabilities or only Web application vulnerabilities or analyze the configuration side. However, that leaves missing pieces in the vulnerability management puzzle.

"All must be present, and each of the steps in a vulnerability management program can benefit from a best practices approach," says Erlin.

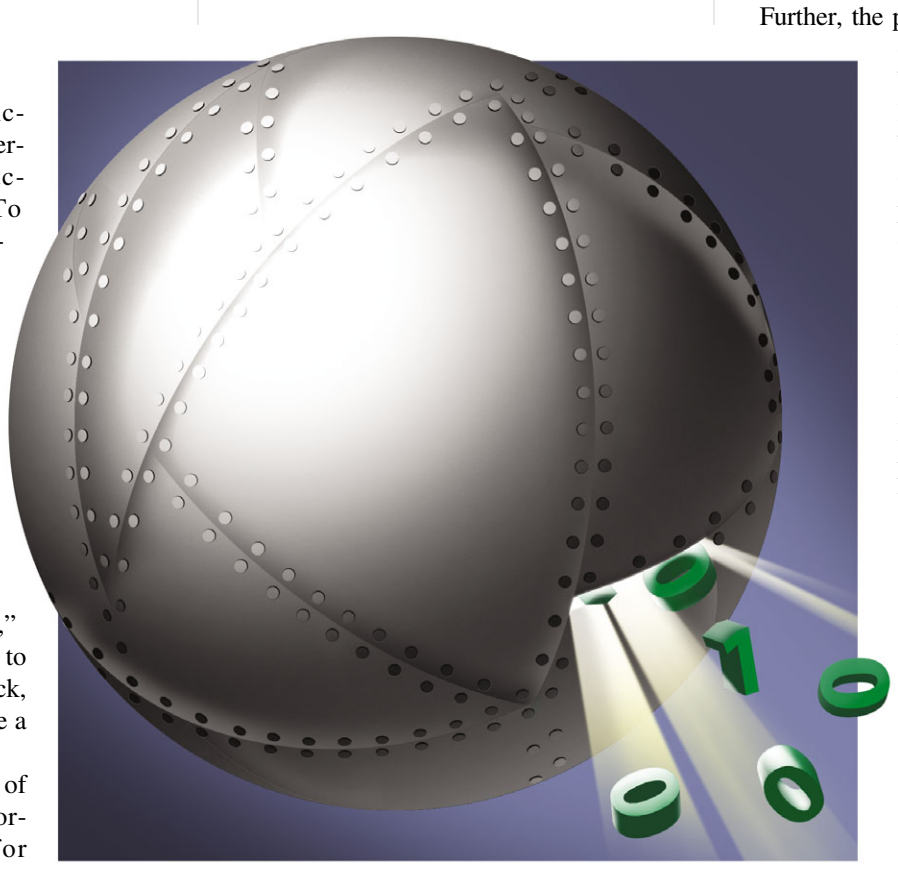
A best practice framework for vulnerability management, then, would consist of:

Comprehensive discovery and profiling. Because the network is generally not a static entity, a continuous and comprehensive discovery process is an absolute must. Tools in this area should provide extensive configuration options for scheduling and profiling so that different parts of the network can be addressed appropriately. Set it and forget it administration eliminates much of the administrative burden.

Assessment of applications and vulnerabilities. Vulnerabilities can only be accurately assessed without an inventory of the applications in which they exist. Tools must provide a complete and separate assessment of applications on each organizational asset.

Prioritization of assets and risk. Every vulnerability management assessment will provide far more threats to address than any organization can accomplish. Therefore, a mechanism must be provided for prioritizing the results to address the highest risk conditions first, even if all the discovered vulnerabilities are critical.

Workflow for remediation. Ultimately, no vulnerability management program can succeed if the process for addressing risk is broken. The right tools can support an effective workflow with open interfaces for automation, built-in ticketing systems, and accurate data. But each organization has different ways of assigning ownership and responsibility. Before acquiring a vulnerability management tool, therefore, examine the processes in place for applying patches and upgrading to determine where they should change and where a tool can assist with automation.



Stay In The Security Loop

Obviously, a core best practice would be to stay up-to-date with the latest information from all available sources about vulnerabilities that could potentially affect the organization.

"Simply subscribing to the vendor's mailing list is not enough since many vendors withhold information about vulnerabilities until they have a patch ready (or longer)," says Ben Greenbaum, senior research manager at Symantec Security Response (www.symantec.com). "There is always some reparative or mitigating action that can be taken in the interim."

Some security vendors, for example, provide services that can keep IT staff abreast of the most recent vulnerability discoveries and provide effective actionable advice well before the vendor ever mentions the issue publicly. It is smart to be as ahead of the curve as possible.

Further, the probability and the impact of exploitation of any vulnerability can be lessened by following some general security best practices: Maintain an environment of least possible privilege (for example, if connectivity to a particular service or system isn't required from all points, limit it to only those points) and deploy firewalls to enforce these limitations, as well as IDS products to monitor and prevent attempts to breach the perimeter.

Cover All Bases

Another best practice is to harness multiple forms of scanning techniques for depth and breadth of coverage. Common scanning methods include: active scanning, otherwise known as network-based assessment; host-based vulnerability assessment, which uses an agent or service deployed on target hosts; and passive observation of network traffic.

"Organizational assets should be scanned frequently, targeting new vulnerabilities using the latest vulnerability information," says Gedeon Hombrebueno, senior product marketing manager for Security Information Management at CA (www.ca.com). "Knowing what vulnerabilities exist is only half the battle. I can't stress it enough that achieving maximum value from vulnerability management efforts requires prompt action against collected data." P

New Standards To Watch For

The vulnerability management market is undergoing significant maturation in terms of tools, technologies, and standards. The federal government, for example, is pushing a set of standards that will increase interoperability across information security. This is being accomplished via a series of protocols that define information formats for sharing between products and security intelligence systems. Known as the Security Content Automation Protocol, or SCAP, it unites a number of existing and new standards that identify software bugs and misconfigurations that could pose a security threat. In essence, this combination of components under the SCAP banner helps automate the vulnerability management process.

"Viruses come in where you are vulnerable. The idea is to lower risk by addressing existing areas of possible attack."

-Enterprise Management Associates' Michael Montecillo

Security January 25, 2008

Q1 Labs Upgrades Network & Security Monitoring Platform

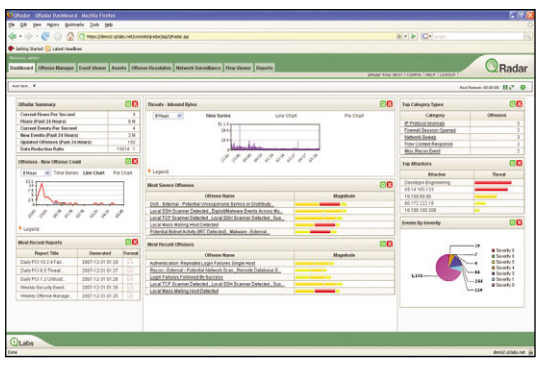
QRadar Offers Enhanced Visibility, Log Management & Analysis

In today's environment, network security, compliance, and event management are of paramount concern. The latest version of Q1 Labs' QRadar addresses those concerns. QRadar is a dual network behavior analysis and security information and event management platform designed for greater control over network security.

QRadar collects data and live network behavior information from sources such as NetFlow, all network-attached security devices, applications, and OSes. QRadar then employs security event correlation and network behavior analysis to sift through data and produce the most pertinent set of actionable data, which network admins can use to make informed decisions at a moment's notice.

QRadar displays network behavior via its flow viewer. The log management and behavior analysis architecture monitors the network and alerts admins to any threats, users, hosts, and assets accessing the network. QRadar's unified design also lets users monitor their network and security infrastructure from a single easy-to-use interface.

QRadar 6.1 lets users search network flow to improve network behavior analysis and security forensics results. Another new feature is the QoS monitoring capability for critical network apps such as VoIP. QRadar 6.1 also features augmented host discovery, asset-based alerting, tamper-proof logs in storage, and event and network flow data.



QRadar's Dashboard tab provides an at-a-glance overview of the status of the network.

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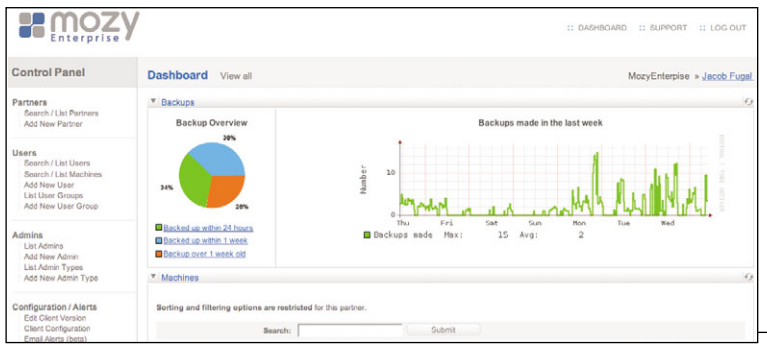
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EMC² where information lives

MozyEnterprise features a stripped-down interface that makes configuring backups and schedules simple. The service comes with preconfigured backup sets that snag and save the most common file types. Advanced users can take the reins and edit the backup sets. The offering also lets users choose how to perform restores.

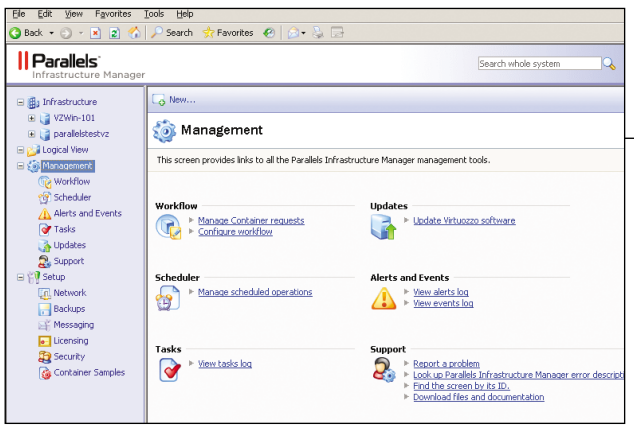
MozyEnterprise's security features include 448-bit Blowfish and 128-bit SSL data encryption during file storage and transfers, user-configurable private encryption key options, and near continuous data protection with backups of new and changed files every two hours. EMC also equipped it with RSA's secure access management and management features.

MozyEnterprise's data backups are locked tightly, with constant onsite monitoring and protective systems that keep your valuable data safe from damage by fire, power outages, and even earthquakes.

NETWORKING & VPN FEBRUARY 22, 2008

Virtualize Your OS

Parallels Virtuozzo Containers 4.0 Partitions Server OSes



You can create dozens to hundreds of containers on each standard physical server.

VIRTUALIZED SERVERS allow SMEs to centralize desktop applications and OSes to create a secure, controlled, and managed environment. Parallels Virtuozzo Containers creates isolated containers of a single physical server and OS instance, which allows IT managers to consolidate performance-sensitive workloads and increase the virtual servers on each physical hardware node without reducing performance. With Parallels Virtuozzo Containers 4.0's granular resource controls, you can make real-time adjustments to hardware resources. Version 4.0 improves the Virtuozzo file system to more effectively use hard drive resources.

Parallels Virtuozzo Containers 4.0

$3,000 per dual CPU

Separates a server OS into independent virtual partitions, which helps increase memory efficiency and avoid virtualization performance bottlenecks

(703) 815-5670

www.parallels.com

Parallels™

Another advantage is the ability to deploy patches and upgrades to all containers and across servers and reduce management time with OS sprawl. To drive uptime, it includes support for high-availability configurations, including clustering in Windows Server 2003 and Red Hat Enterprise Linux, as well as Microsoft Network Load Balancing. The software supports real-time backup from Linux and Windows and features a complete and automated backup scheduler.

Parallels Virtuozzo features a Transporter tool to let you select and migrate resources from a physical or Virtual Machine Monitor server to a container. 4.0 introduces the Parallels Infrastructure Manager, which lets IT admins manage the infrastructure via dashboards.

NETWORKING & VPN FEBRUARY 22, 2008

Consolidate IT Management

LANDesk Management Suite 8.8 Provides Easy Migration, Automation



LANDESK MANAGEMENT SUITE from Avocent puts all IT management tasks into one console. This saves IT a great deal of time when managing security, compliance, and various other system management tasks. The Management Suite also enables automation of certain tasks.

The software can be used to manage multiple locations and is designed for easy migration, simplifying the transfer of users and their profiles to new operating systems. It works across heterogeneous networks and can be used anywhere at any time, enabling users to work with every device in a complex network. In general, the software suite is designed for easy security and management of networks in an enterprise environment.

LANDesk Management Suite v8.8 adds to the foundation already established by earlier versions of the software suite. Setup and some regular tasks are now wizard-based for greater ease of use. With version 8.8, LANDesk users can now remotely manage devices, including Windows Vista machines, from a Mac console.

Software license monitoring and distribution has improved: Managers now have custom access to software packages according to group. Software is automatically installed and removed based on manager-preset access permissions. Extensive platform support lets IT managers keep track of the variety of devices that populate a complex network environment.

Other features of LANDesk Management Suite 8.8 include Intel vPro support, a local scheduler, more than 100 provisioning templates for optimal hardware configurations, and robust alerts.

LANDesk Management Suite 8.8

$92

IT management software that puts control of a variety of management tasks onto a single console, saving money for the company and time for IT professionals

(800) 982-2130

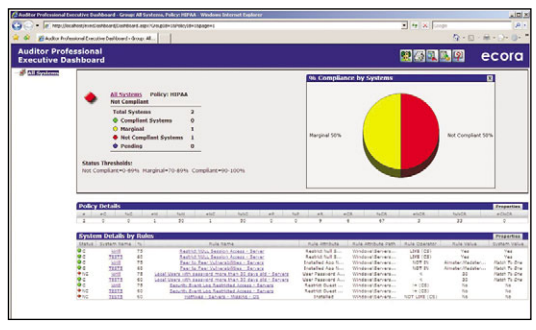
www.landesk.com

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NETWORKING & VPN FEBRUARY 22, 2008

Advanced Auditing Tools

Ecora Auditor Professional 4.5 Offers Improved Performance



Ecora's Auditor Professional 4.5 includes a dashboard that clearly displays systems' level of compliance.

TODAY'S SECURITY demands and compliance requirements make it more important than ever for a company to have a system in place to monitor data center activity and configurations. Ecora Software's Auditor Professional 4.5 can help companies ensure that their data centers meet both.

Version 4.5 provides auditing and analytics tools to help IT managers adapt data centers and achieve the best configurations. Auditor Professional also improves security and performance by implementing closed-loop change validation and alerting staff when authorized and unauthorized changes occur.

Auditor Professional provides compliance data for security and compliance professionals. Its dashboards can be customized to provide exactly the type of info a user needs. Ecora has also made improvements to the readability, content, and appearance of the software-generated reports. Version 4.5 not only helps companies comply with standards and regulations but helps reduce downtime and improve security.

Users may choose to collect data agentlessly, use agents on select systems, or combine both methods. This lets the software provide audit data, even for systems in a DMZ. Ecora Auditor Professional detects systems using several methods, including IP discovery and Active Directory. It collects not only OS security and configuration data but also that of databases, applications, firewalls, and network devices.

Auditor Professional 4.5 is also compatible with BMC Remedy 6 and HP Service Desk 4.5 and now supports Cisco ASA, Z-Linux, Centos, and Oracle Enterprise Linux, as well as the 18 platforms already supported. Pricing for Auditor Professional varies depending on the unique hardware and configuration of the client environment.

Ecora Auditor Professional 4.5

Software that monitors configuration changes for better security and compliance

(877) 923-2672

www.ecora.com

ecora

PHYSICAL INFRASTRUCTURE FEBRUARY 22, 2008

KVM Shopping? Consider Price, Quality

New ATEN Consoles Bring High Quality, Affordability To Smaller Businesses



ATEN TECHNOLOGY'S NEWEST KVM switches, available in both 8- and 16-port models, combine high-quality features and a price that's affordable for the small to midsized business.

Both the KH1508i and KH1516i support up to 64 user accounts and allow up to 32 concurrent logins. Users can communicate with each other using the built-in message board feature, or a single user can take control of the KVM functions. Multisession functionality means you can easily view all server activity and switch among servers connected to the device, and a Panel Array Mode lets you view all ports at the same time. Password protection and advanced encryption technologies mean access to your servers is secure.

The new ATEN KVM over the NET switches feature:

- Built-in TCP/IP and remote management functionality, so it's simple for you to manage and control the devices from virtually anywhere you can access the Internet
- CAT 5 (or higher) cabling for less cable bulk; RJ-45 connectors allow implementation of all ports
- Daisy-chaining capabilities and dedicated chain ports, so you can connect multiple switches together to access up to 128 devices with the 8-port model and up to 256 devices with the 16-port model
- Remote power control for attached ATEN PDU devices
- A Windows client and a Java client that work with most OSes
- Ability to work with PC, Mac, Sun, and terminal-based systems and support for major server platforms and VT100-based serial devices
- Radius server support

ATEN KH1508i (8-port) & KH1516i (16-port)

$849.95 (8-port) and $999.95 (16-port)

KVM consoles featuring built-in remote management and multisession capabilities

(888) 999-2836 or (732) 356-1703

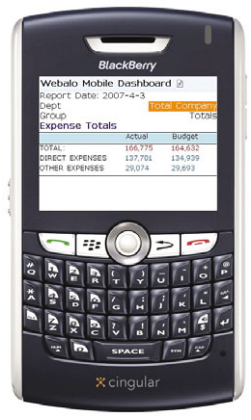
www.aten-usa.com

ATEN Simply Better Connections™

CLIENTS FEBRUARY 29, 2008

Information On The Go

Webalo Mobile Dashboard Provides Real-Time Intelligence



View reports on your handheld with Webalo Mobile Dashboard.

FOR COMPANIES THAT NEED to provide executives and other mobile decision makers with real-time business intelligence reports but need to host the service internally for compliance or policy reasons, Webalo created the Mobile Dashboard Appliance. This appliance can provide up-to-the-minute information, such as sales forecasts, inventory status, staff utilization, and other key performance data, to handheld devices in virtually any location.

From a Web browser, admins can configure the delivery of pre-existing, internal reports from spreadsheets or other business applications. The Web-based interface uses a simple Q&A setup to walk administrators through the process of setting up permissions for each individual user and formats the reports automatically. The reports are generated dynamically and can retain the same look and feel of the handheld device by tailoring itself to the device's screen size.

The Mobile Dashboard Appliance is a preconfigured, 2U rackmount server with Gigabit Ethernet. It can deliver service to 500 mobile users with clusters supporting up to 10,000. Installation is simple, with a Web-based interface that helps admins configure and manage the appliance. This interface is relatively easy to use and can be run by employees with basic Web and Microsoft Excel skills. Because the application is hosted internally, companies can maintain their critical information behind a firewall, rather than using an outside service.

To ensure reliability, the appliance supports scheduled backups of encrypted data over SMB (Samba) or NFS. The appliance can also be configured with automatic updates from Webalo.

Webalo Mobile Dashboard Appliance is compatible with most mobile devices, including wirelessly connected BlackBerry, Microsoft Windows Mobile, Palm Treo, and Java-enabled smartphones.

Webalo Mobile Dashboard Appliance

$7,500 for up to 500 users, plus a monthly subscription fee of $25 per user

Enables administrators to securely deliver real-time business intelligence reports to mobile decision makers

(310) 828-7335

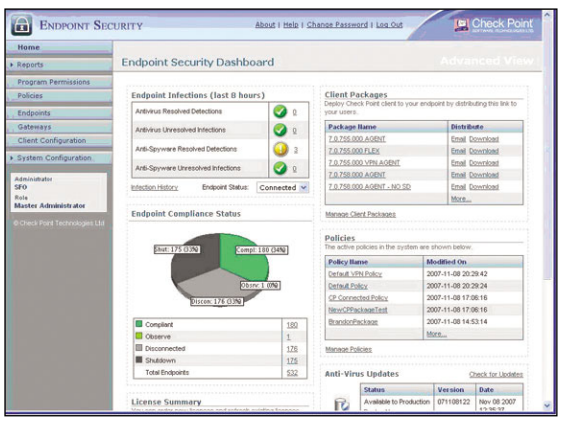
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SECURITY FEBRUARY 29, 2008

All-In-One Security

Check Point Endpoint Security Covers Firewall, NAC & More



Administrators can monitor multiple security agents with the Check Point Endpoint Security Dashboard.

MANAGING MULTIPLE AGENTS to protect data is time-consuming and expensive. Check Point is working to alleviate those problems with its Endpoint Security, which combines firewall, NAC, program control, antivirus, antispyware, data security, and remote access.

Endpoint Security incorporates many independently recognized technologies, including an industry-leading firewall; anti-malware based on ZoneAlarm; data security based on Pointsec technology; and market-leading remote access VPN.

Check Point provides a single software agent, single-management console, and single installation that can be managed by one administrator. With Endpoint Security's SmartDefense Program Advisor service, administrators can control which programs can run on PCs. To automate policy decisions and terminate malicious programs, administrators can reference a dynamic database of hundreds of thousands of known good and bad programs.

Check Point's firewall and NAC restrict inbound and outbound traffic to ensure systems are secure before granting access. Antivirus and antispyware components use a combination of signatures, behavior blockers, and heuristic analysis. To protect data, the program uses full-disk encryption, access control, port management, and removable media encryption.

Check Point Endpoint Security

Check Point Endpoint Security Secure Access Edition costs as low as $30 per endpoint for 5,000 or more endpoints

Gives administrators a central management console to access many security agents, including a firewall, program control, antivirus, data security, and more

(800) 429-4391

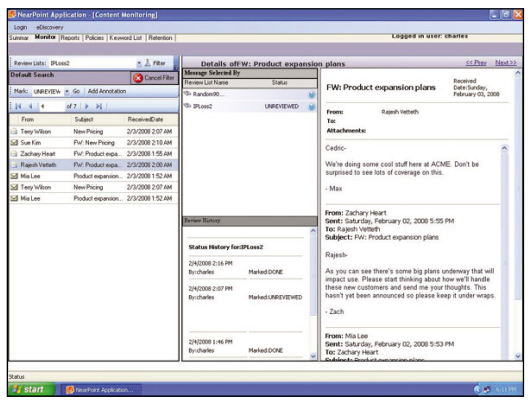
www.checkpoint.com

Check Point® SOFTWARE TECHNOLOGIES LTD.

MESSAGING & TELEPHONY FEBRUARY 29, 2008

Police Your Network

Mimosa Systems' NearPoint Add-on Options For Microsoft Exchange Server



You can expand the functionality of your NearPoint for Microsoft Exchange Server to include real-time email content monitoring and expedite the search and retrieval of ESI data.

ALTHOUGH E-DISCOVERY products let your SME comply with regulations, not all e-discovery software monitors email in real time or lets you sort through potentially relevant ESI (electronically stored information) data based on file attributes. With Mimosa Systems' NearPoint Custodian Collector Option and Content Monitoring Option, you can add powerful tools to your NearPoint for Microsoft Exchange Server.

The NearPoint Custodian Collector Option lets you search for, preserve, and assess ESI files from file shares, laptops, and desktops. Then the software can place a forensically defensible copy of the pertinent documents and files into NearPoint's archive. And the software can scan files based on a variety of file attributes, including document owner, modification date, and file type. The Custodian Collector Option can help your SME decrease time needed to identify relevant content for litigation.

The NearPoint Content Monitoring Option lets staff use the NearPoint server to monitor email in real time for policy violations and alert management to risky behavior. The Content Monitoring Option has a policy creation wizard for configuring policies and a customizable keyword list for lexicon creation. It sends email alerts to auditors, so managers don't need to check content logs.

Mimosa Systems NearPoint Custodian Collector Option & Content Monitoring Option

$6 per mailbox for Custodian Collector Option; $16 per mailbox for Content Monitoring Option

Powerful add-on options automate file management and alert you to policy violations

(408) 970-9070

www.mimosasystems.com

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AMERICAN HOME MORTGAGE - Sale #2

Thousands of Computers, Notebooks, Servers, Routing & Networking Equipment, Plus Approximately 1000 Office Cubicles

Webcast Auction: *April 16 & 17, 2008*

Online Preview: *Available at www.dovebid.com*

On-Location Preview: *By appointment only.*
For further information or preview appointment, please contact ***Doug Escudero***
E-mail: *descudero@dovebid.com* · ***Phone:*** *650.207.9927*

Auction & Preview Location: *Melville, NY*

IBM Servers: *Over (35) HS20 Blade Center, With Quad Xeon 3.6GHz, 3.0GHz Processors; Over (80) E-Servers X-Series 366, 345, 336 & 335 Rack Mount, With Xeon Dual Quad & Quad 2.7GHz to 3.6GHz*

Sun Servers: *(2) SunFire 4200; SunFire 15K Mainframe; Enterprise 6400*

Hewlett-Packard Servers: *(3) Proliant DL-460, With Quad 2.6GHz Processors; (7) Proliant DL-385, With Quad 2.8GHz Processors*

Routers: *Large Quantity of Cisco 3825, 3735, 2811, 2621 XM, 1800, 1700, 871 & 831 Series*

Switches: *Large Quantity of Cisco WS-3750 48-Port & WS-2950 24-Port*

Firewall VPN Appliances: *Large Quantity of Cisco ASA-5550 & ASA-5520 BUN-K9*

KVM Voice-Over-IP Switches: *(3) Raritan KX-232 32-Port*

Telephone Sets: *Approximately (30) Polycom VoiceStation 300 Full Duplex Conference; 100s of Inter-Tel 8520 Digital*

Personal Computers: *Over (50) Hewlett-Packard Compaq Pentium IV Mini Tower & Desktop; Approximately (50) IBM ThinkPad R-51, R-50 & T-40 Notebook*

Flat Panel Monitors: *Over (100) 19" & 17"*

Printers: *100s of Hewlett-Packard Color & Laser; Large Quantity of OKI-Data Digital LED*

Copiers: *Canon; Ricoh; Sharp; Toshiba*

LCD TVs: *(14) 40" to 46" HDTV Flat Panel*

Office Furniture: *Large Quantity of Steelcase Modular Workstations; Approximately (30) Cherry & Mahogany Executive Office Suites; Cherry Executive Conference Tables; Over (40) Herman Miller Aeron & 100s of 5-Caster Ergonomic Arm Chairs*

Large Quantity of General Electric Stainless Steel Refrigerator/Freezers, Ice Machines & Microwave Ovens

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PRODUCT OF THE WEEK

Racking Up Storage Solutions

Rackmount Solutions' Network Series Adjusts For Flexible Cabling

by Curt Harler

• • •

"RACK 'EM UP!" Whether that call to action comes in a billiard hall or in a data center, the situation demands a tight, well-produced product that will serve immediate needs, as well as the long-term requirements of the game. Rackmount Solutions (972/272-6631; www.rackmountsolutions.net), in Garland, Texas, produces racks of all sizes and sorts queued for the data center market.

According to Deborah Petty, president of Rackmount Solutions, the company produces a complete line of two-post, four-post, and rail-mount racks; shelves; and power strips for the SME data center. It also produces a special large cable cabinet that is outstanding for its flexibility in allowing space on either side of the cabinet for cable pulls.

"Flexibility in cable handling is the key," says Geoffrey Pearlman, network systems analyst at South Oaks Hospital, in Amityville, N.Y. He is working on a campus network upgrade with several buildings. "We had closets and switches all over the place. I wanted to consolidate everything," he says. He had used Rackmount and other manufacturers' products in the past and knew that he wanted racks and cabinets that would allow him to maintain neat cable runs into the boxes.

Special Cable Cabinet

Rackmount's Network Series rack has a welded frame of extruded and die-cast aluminum. It features two sets of universal, square-hole rack rails on an adjustable left-to-right track allowing 19-, 23-, or 24-inch rackmounting of equipment.

What makes it attractive to the SME is that the shelves can slide over either to the right or to the left side of the cabinet, depending on the required configuration in the data center. This allows a sizable alley of vertical space for work room or cable runs. The rack rails move front to back to a depth of 24 inches, for flexibility on racking around the cables. Offsetting the racks from the front or rear to allow for cabling is a matter of sliding the rack rails forward or backward. They are inset a standard 3 inches from the front in a 35- or 41-inch-deep frame, so there are up to 14 inches of space to drop cables down the back of the frame.

Petty says SMEs can order a 28.33-inch-wide rack (external dimension) or a 32.33-inch-wide rack. With a 32-inch width, rack rails set to 19 inches provide 13 inches of empty space to place cables. "This keeps them from pinching, crowding, or being forced into awkward angles," she explains. With those 13 inches of empty space, users can move 19-inch rack rails completely to the left or right or split the empty space in the center and drop cables down both sides of the cabinet. Because the unit is modular, users can pick only the features they need.

Racks

Rackmount offers top-quality, flexible racking solutions. "If you need something done a little differently, chances are we can do it," says Petty. Either the company has its product readily available, or, for applications that require different heights, depths, widths, and colors, product is made to order. That process typically takes 10 to 14 days.



If an SME decides to set rails at 19, 23, or 24 inches, Rackmount has shelves, keyboard trays, and drawers. "If you decide to enclose the unit, we have fan tops, fan trays, fan panels, etc.," Petty says.

Pearlman was sold on the ability to move the rails around to get space wherever he needed it.

Pearlman likes the extra space, especially on the large rack. "These cabinets are great and make it much easier to work with than your standard rack with no space on the sides for large cable bundles," Pearlman says. "It let us cable 350 drops into one rack really neatly."

In one situation, Pearlman centered the rack, allowing him to bring cable in on both sides. In another, he shifted everything to the left, running all the cables in on one side. "What's nice is that everything is off to the side. You can't see any of it," he says.

For those applications requiring rack rails at 23 or 24 inches, but require a few items racked to 19 inches, the company offers reducer brackets. Cable management can be made to order, or customers can use standard stock cable managers or D-rings.

All of Rackmount Solutions' racks are available in the same six standard colors as the rest of the company's server cabinet series.

"This rack unit is manufactured to the same strict steel and ISO processes as our standard server rack series," Petty says. This includes the NEBS seismic unit, A/C unit, and 4-Post Server Rack Frame (6-rail). "Everything matches for a neat and tidy appearance in the data room," she adds. The rack unit also has GSA approval.

Government-Approved

Rackmount Solutions has a pair of approved vendor certifications for government agencies. Its #GS-35F-0208R, IT 70-Information Technology, was awarded by the GSA (General Services Administration) in December 2005, and its #GS-28F-0011T, Schedule 71, Part 1-Office Furniture is effective Jan. 1, 2007, until Jan. 9, 2012.

Petty is proud of the fact that all of Rackmount's products, with the exception of a single economy-level cabinet, are made in the United States with American processed steel. "I do like to wave the flag," she says.

The company's NET7319-2430 frame starts at $1,042. The same unit, fully enclosed with perforated front and rear door, solid side panels, and a fan top is $2,153. Discounts are available for quantity orders.

The changing requirements for rackmounting networking and switching equipment have consistently been focused around the increasing cable management routing provisions and space, as well as adapting to the "racking" requirements of the equipment itself, which has gotten larger and heavier with more unique cable management requirements, Petty says. "The flexibility of the Network Series Rack is specifically designed to address those issues," she adds. P

PRODUCT OF THE WEEK

RACKMOUNT SOLUTIONS NETWORK SERIES RACK

Description: Storage racks for 19-, 23-, 24-, and 28-inch-wide equipment with adjustable rack rails to allow for different cabling options

Interesting fact: The racks are especially good for switches from Cisco or Sun that have cabling coming off the front toward one side.

(972) 272-6631
www.rackmountsolutions.net

FOUR FEATURES HANDY FOR SMES

1. Frame-only units (for easy access) are available.
2. Units with side panels are also available, with perforated front and rear doors optional. If security is an issue, these can be enclosed and locked. To gang side-by-side, a user can purchase only one side panel.
3. The unit comes standard with casters, levelers, and 40 pieces of M6 hardware.
4. Standard server cabinet options such as fan tops, sliding shelves, and keyboard trays also are available.

CLIENTS

FEBRUARY 8, 2008

Rugged & Mobile

Glacier's Ridgeline Tablet PC Brings Computing Power To Harsh Environments



ALL OF US KNOW that harsh environments and electronics do not mix. However, many industries are unable to avoid harsh conditions. That's why Glacier Computer developed the Ridgeline Tablet PC. With this rugged tablet computer, construction, utility, and delivery workers can easily retrieve, send, and manage information.

This rugged tablet computer can withstand repeated 3-foot drops to concrete, and water and humidity extremes at virtually any temperature. The Ridgeline Tablet PC can operate in temperatures ranging from -20 to 60 degrees Celsius. This tablet withstands even greater storage temperatures, ranging from -40 to 70 C.

For workers on the move, the Ridgeline is portable and comes with a choice of a 10.4-inch SVGA or XGA transmissive TFT touchscreen display with a sunlight-readable option. Numerous hard drive options are available and up to 16GB of Compact Flash memory can be added.

This tablet runs on WinXP Pro or Embedded and can run any application. It uses a VIA Eden 1GHz processor and can be configured with up to 1.25GB of DRAM.

For extra efficiency and functionality while on the go, Glacier includes Bluetooth 2.0 and 802.11a/b/g connectivity. Should your needs require GPS, there is an optional built-in GPS with integrated antenna.

On the front of the device you'll find various application buttons, including 12 numeric keys, one software keyboard button, four programmable function buttons, and a four-way navigation button with integrated Enter button.

Many connectivity ports are available, including two USB 2.0 ports, a VGA output, RJ45 and RJ11 jacks, headphone jack, microphone jack, and a docking connector. This tablet also comes with an internal microphone and stereo speaker.

Glacier Computer Ridgeline Tablet PC

Starts at $3,000

Rugged tablet computer that gives your mobile workforce the flexibility and durability they need

(603) 882-1560

www.glaciercomputer.com

Product Releases

Do you have a new product that data center/IT managers would be interested in learning about?

Send your press release or related product information to press@processor.com.

Clients

■ **Axiomtex** launched the IPC220, a 2U industrial computer system that provides data redundancy and increases fault tolerance. The IPC220 comes with an Intel Core 2 Duo processor and an Intel Q965+ICH8DO Express chipset on 300-watt ATX motherboards with two free PCI slots for expansion. Furthermore, the IPC220 comes with two Gigabit Ethernet ports, six high-speed USB 2.0 ports, PS/2 keyboard and mouse inputs, audio, one COM port, and one CRT connector, as well as support for 32- and 64-bit operating systems. ICP220 is ideal for factory automation, DVR, mail server, firewall, ISP, and telecommunications.

Axiomtek also introduced a slim-panel LCD monitor, the PANEL6158, to save space, as well as provide a bright display that can be matched to the user's preference. PANEL6158 supports multisignal (DVI, VGA, S-Video, video) input and comes equipped with 15-inch, 250 nits XGA LCD (1,024 x 768 resolution) touchscreen features. It can be mounted on a panel, wall, or rack, as well as VESA FPMPMI mount. PANEL6158 supports USB or serial interface touchscreen controls and is powered by locked AC-in or 24V DC-in.

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■ **Motion Computing** announced the F5 tablet PC, which strikes a balance between commercial-grade devices and fully rugged PCs. The F5 includes Intel Centrino processor technology; is IP54-rated and designed to withstand exposure to dust and moisture; and comes with a shock-mounted hard drive, an optional SanDisk 32GB SSD (solid-state drive), embedded wireless broadband for continuous data access, a digital camera, RFID, and an optional barcode scanner. In addition, the F5's field-ready slate design includes a magnesium frame, View Anywhere outdoor display, a built-in handle, and protective covering.

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■ **Novell** has released the latest version of Novell's Linux solution for retailers, SUSE Linux Enterprise Point of Service. Management can customize computing environments and supervise point-of-service systems. The POS central administration server manages POS device images, matches the images to hardware profiles, allocates the images to branch servers, and then automatically installs the images on POS devices. SUSE Linux Enterprise Point of Service also supports application development by delivering enhancement tools, enabling hardware, and configuring patterns and scripts for various POS environments.

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■ **Wyse Technology** announced the Wyse X90L and X90Le mobile thin clients. The thin clients feature Gigabit Ethernet; 802.11b/g/n Wireless LAN connectivity and Cisco CCX; a 15.4-inch, widescreen WXGA TFT screen; DVI and VGA display ports; multimedia support in virtualized desktop environments; an Express card slot; built-in Bluetooth 2.0 support; an SD card slot; and an integrated smart card reader and Citrix Password Manager Client. The Wyse X90L and X90Le are based on Windows XP and are designed for industries that require mobile computing, such as healthcare, financial services, and government use. The Wyse X90L and X90Le can also use desktop virtualization tools, such as Citrix Presentation Server and Citrix XenDesktop, VMware VDI (Virtual Desktop Infrastructure), and Microsoft Windows Terminal Server.

Messaging & Telephony

■ **Microsoft** has announced that it will offer Microsoft Online Services to businesses of all sizes. Currently, U.S.-based companies can register for a limited beta trial at www.mosbeta.com. The service is based on the software in Microsoft Exchange Server 2007 and Microsoft Office SharePoint Server 2007. Available features include email access, calendaring, contacts, shared workspaces, Web conferencing, and video-conferencing. The secure, Web-based interface will enhance IT monitoring services. This flexible software management tool will be widely available to enterprises in the second half of this year.

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■ **Open Text** has announced the Livelink ECM-Extended Collaboration, which will accelerate organizations' processes, increase social computing, and extend Web 2.0 power. The new Enterprise 2.0 strategy will provide 2.0 capabilities through Open Text's development of wikis, forums, blogs, tagging, moderation, and real-time communication. Using the security in place, ECM enforces access control and retention policies without compromising the integrity of the current administrative functions. Project workspaces can be dedicated to promoting a greater focus due to the consolidation and storage of project plans, documents, task lists, and URLs.

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■ **Proginet** released the CFI Attachment Manager, a software-based platform dedicated to managing incoming and outgoing email attachments. The CFI Attachment Manager lets users send and receive email attachments of any size without exceeding mailbox limits or bogging down the mail server. The offering also audits every attachment for regulatory compliance and e-discovery purposes. The CFI Attachment Manager integrates with existing email systems, encrypts attachments for secure transfer, creates logs and time stamps at every stage of the email's life cycle, and even simplifies email server maintenance and backup.

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■ **Siemens Enterprise Communications** introduced the OpenScape Unified Communications Server, a software-based communications platform that combines voice, video, and unified communications devices into a fully interoperable system. Siemens' offering consists of the OpenScape Voice Application, OpenScape Video, and OpenScape UC Application V3. OpenScape UC Server supports both IP telephony and legacy PBX telephony environments. Upgrading the offering to meet your needs is also as simple as activating the desired license keys on a per-user basis (up to 20,000 concurrent users).

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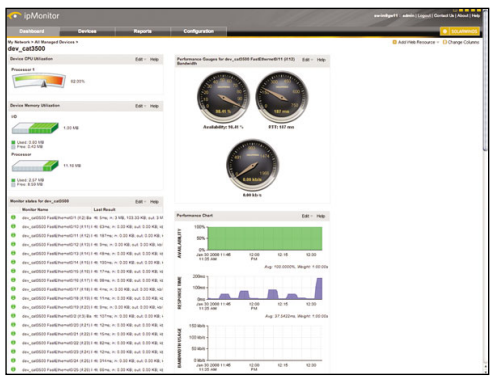
Networking & VPN — February 8, 2008

Network Monitoring With SolarWinds

ipMonitor v9.0 Features SmartMonitor Technology

When a product comes along that automates common tasks and makes monitoring critical systems easier, IT takes notice. That's the case with SolarWinds' ipMonitor network, server, and application monitoring system.

The ipMonitor Web-based utility features an easy-to-use graphical interface and concise dashboard views that deliver insight into the health of the network and application infrastructure.



The Dashboard tab lets ipMonitor 9.0 users get a snapshot of resource utilization and network performance.

The software comes with more than 50 built-in monitors for reporting on routers, switches, and servers. Built-in app monitors include Active Directory, DNS, Microsoft Exchange, FTP, Web, IMAP, and SMTP.

Other capabilities include rapid discovery of IP-based network devices, the ability to group devices logically and dynamically, a network mapping capability that tracks data and lets users take corrective actions in the event of a failure, and automated recovery and remediation functions. Once a device is discovered, users can look up the device's attributes, query a server or device for a list of appropriate monitors that work with it, and manually add new monitors.

The ipMonitor v9.0's SmartMonitor capability recommends the best and most appropriate settings for analyzing the organization's specific application and network infrastructure, eliminating the task of manually selecting and tuning the monitors. Admins can also roll out ipMonitor v9.0 without an agent.

SolarWinds ipMonitor v9.0

Starts at $1,495

Monitors your network, server, and applications

(866) 530-8100

www.solarwinds.com

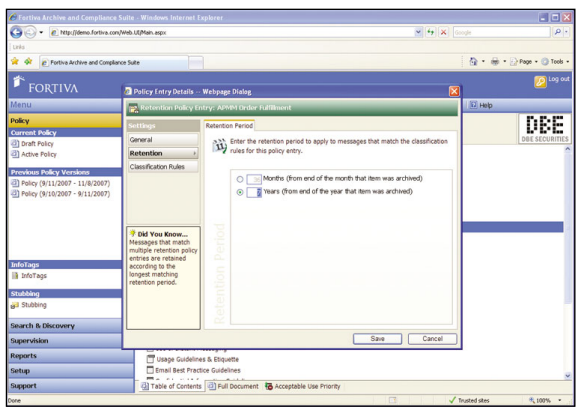
SOLARWINDS

Messaging & Telephony — February 15, 2008

Email Archiving

Fortiva's SmartStore Helps You Meet FRCP Requirements

Fortiva SmartStore archive helps you meet the demands of the Federal Rules of Civil Procedure without adding additional infrastructure or IT staff. This SaaS (software as a service) package gives you the ability to archive all e-mail in a central location, enforce policies and litigation holds, perform enterprise searches, and conduct early case assessment. Perhaps best of all, Fortiva claims that you'll get this functionality for the same or less than the cost of storing and managing the data on enterprise storage in-house. As an additional benefit, SmartStore's stubbing feature can help to reduce the demands on Exchange, thereby improving email storage management.



Fortiva SmartStore lets you customize retention policies to comply with various regulations.

Because the penalties for failing to enforce a consistent retention policy or being unprepared to produce email in a timely fashion can be quite stiff, having effective search and retrieval capabilities is a top priority for many businesses. To help meet these requirements, SmartStore gives customers access to sophisticated search tools without the cost of maintaining the servers required for enterprise-grade search in-house. Should your company need access to real-time search for more intensive e-discovery requirements, you can upgrade SmartStore archive to the full Fortiva Archiving Suite at any time.

Fortiva SmartStore

Starts at $1.10 per user, per month for a 1,000-user company

Gives companies the ability to archive email, comply with federal regulations, and meet discovery requests for a reasonable price

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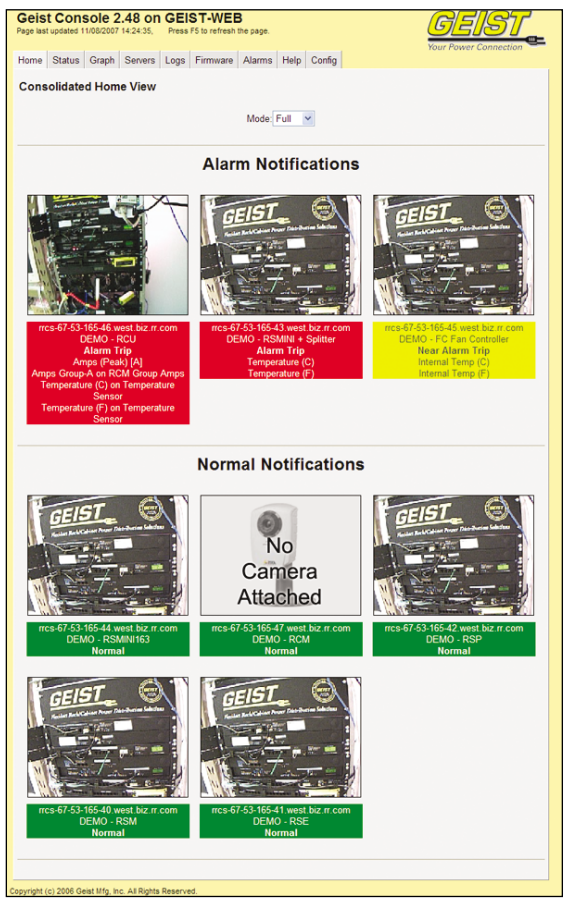
FORTIVA

PHYSICAL INFRASTRUCTURE

MARCH 7, 2008

How Do You Know If Your Data Center Is Green?

Geist RacSense Console Software Can Provide Real-Time Updates On Equipment Conditions



Each monitored product is displayed with a color-coded status bar for easy visual indication of alarm or normal readings, along with a Web cam image associated with the corresponding unit.

"IT'S NOT EASY bein' green," according to a popular 1970s song by Kermit the Frog. Today, most data center managers would agree. With a myriad of information coming at managers every day, how can you decipher what information is needed?

One way is to gather as much information as you can about your data center and then look for trends in data over time. As changes are made to make data centers more efficient, the data can be quantified and presented to management as proof things are changing for the better.

How do managers gather all of this data? That's where Geist Manufacturing can help. Geist offers a line of products specifically designed to gather pertinent power and environmental data center information. Geist also offers a software product to neatly bundle collected information, analyze it, and help you make informed decisions related to power consumption by both IT and facilities equipment. Not only can you "green up," you can also increase your ROI with use of RSCS-2 (RacSense Console Software).

Aggregate Data

RSCS-2 offers an inexpensive way to aggregate data from any of Geist's intelligent power distribution products, including remote power monitoring, environmental monitoring, variable speed fan control, and remote outlet control units.

Geist RacSense Console Software (RSCS-2)

$513.97 (free two-device version available)

Aggregates data from any of Geist's intelligent power distribution products, including remote power monitoring, environmental monitoring, variable speed fan control, and remote outlet control units

(800) 432-3219

www.geistmfg.com
www.racsense.com

GEIST

Geist's RSCS-2 software costs $513.97 but is often included free of charge with a substantial purchase of Geist hardware.

The ability to monitor and update up to 100 Geist Web-enabled devices from a single IP address makes the RSCS-2 an invaluable tool. Each monitored product is displayed with a color-coded status bar for easy visual indication of alarm or normal readings, along with a Web cam image associated with the corresponding unit.

Real-time measurement data for individual readings, such as Temperature or Real Power, can be displayed in bar graph format, allowing a data-center-wide view of specific conditions. These same readings can be viewed by comparison graphs via an aggregate view, enabling instant identification of locations that are underperforming or affected during specific time periods. Trend analysis can also show data center hot spots or help in re-creation of notable events. Each graphed variable provides click-through access back to the main unit for user convenience.

Push Updates

The RSCS-2's push update feature offers an easy way to update firmware and alarm settings for your installed Geist products. This feature can be set to automatically update RacSense units to the most current version of firmware, eliminating the need for technicians to spend hours going to each product when new firmware is released. This lets users stay up-to-date with the latest features and enhancements with minimal effort.

The RSCS-2 software also includes standard pages to help with configuration, alarm management, and logged data management, as well as a full help menu with detailed descriptions of each page and its functions. A free, two-device version (RSC Lite Software) is available for testing and qualification. This can be downloaded from the RacSense Web site at www.racsense.com/support/#RSC_Software.

Product Releases

Continued from Page 17

■ **St. Bernard Software** released the iPrism IM (Instant Messaging) Filter and version 6.0 of the iPrism Web Filter. The iPrism IM Filter integrates on-premises appliances and on-demand services to provide deep-packet inspection and compliance with corporate messaging policies. iPrism IM Filter supports, monitors, and filters employee use of IM protocols to enable content filtering and file transfer blocks that violate corporate usage policies. iPrism Web Filter 6.0 offers network antivirus and antispyware as a standard feature, which helps protect customers from malware that attempts to penetrate organizational networks. The Web security software scans Web content and blocks malware to offer perimeter protection from viruses, spyware, and phishing.

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■ A component of the Sybase Information Anywhere Suite, called iAnywhere Mobile Office, is now available from **Sybase iAnywhere**. iAnywhere Mobile Office is designed to be a more robust email inbox offering for mobile devices and features fully integrated wireless email, PIM, and security and business process mobilization. The wireless email feature is powered by a component of Information Anywhere called OneBridge, which features faster email delivery, simplified management, and reduction in costs of ownership. Security features such as password enforcement, data encryption, and lockdown functions are facilitated by Afaria, another Information Anywhere component.

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■ **TalkSwitch** announced version 6.0 of its configuration software, a platform designed to efficiently install TalkSwitch systems and offer additional configuration opportunities. The configuration software features system configuration fields, documentation and help files, an automated attendant, and individual extension prompts in English, Spanish, or French. Companies that operate in more than one language can use multiple languages on the same system. The configuration software also features a new Java-based graphical user interface with built-in help files at each configuration section. Version 6.0 enables customers to use up to four different service providers, and the number of Call Bridge accounts can be set from four to eight.

NETWORKING & VPN

■ **AQM Solutions** has released its TriTune software, which includes enhanced support for z/OS 1.9, IMS 10, and Websphere for z/OS 6.0 and 6.1. AQM has also released an enhanced version of APC 4.6, its automated performance and measurement platform. Both releases are part of the company's automated Application Quality Management product, which proactively identifies potential application tuning opportunities before performance problems occur. AQM says automated ACMs assist companies in saving money by eliminating CPU upgrades that are unnecessary and expensive. New features in TriTune 4.1 include giving IBM Websphere Application Server 6.0 and 6.1 users visibility into the transaction level, thus providing reports on system and application class/method activity, SQL activity, and heap and garbage collection activity. APC 4.6 has added functionality to the automated performance measurement and analysis platform that helps reduce the need for manual performance analysis while increasing the scope of application-tuning opportunities.

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■ **Converge** now offers Asset Manager 2.0, a Web-based application that helps companies track the impact of the disposal of IT assets. Asset Manager 2.0 assesses not only the financial but also the security impact of disposing of assets. Version 2 improves access control and includes new features, such as Chain-of-Custody Reporting. Other features include Settlement Summary, Certificate of Compliant Data Erasure, and Certificates of Compliant Recycling and Destruction. Asset Manager 2.0 can help companies dispose of assets in such a way that the disposal is compliant with regulations and offers the possibility of profiting financially from the disposal. This application also provides real-time tracking for a quick view of where a piece of equipment is in the disposal process.

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■ **D-Link** expanded its Green Ethernet technology series with two environmentally friendly small-business Gigabit switches. The new energy-efficient DGS-1016D 16-port and DGS-1024D 24-port high-performance, rack-mountable switches can provide significant energy savings by reducing power consumption without sacrificing operational performance and functionality.

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■ **FreeBSD Project** has introduced FreeBSD Version 7.0, which includes improved networking, security, multimedia, and storage. It also applies the first official ZFS file system outside of Solaris. Version 7.0 features improved SMP and kernel schedulers and adds "gvirstor," the FreeBSD GEOM Storage Virtualization Layer. FreeBSD v7.0 also implements GEOM virtual storage device, GEOM file system-independent journaling, and GEOM storage failover between multiple devices. Support for several network drivers is offered through TSO (TCP Segmentation Offload) and LRO (Large Receive Offload), while TCP buffers the automatic scaling for quicker transfer rates.

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■ **Infineon Technologies** has unveiled the TCMS (Trusted Computing Management Server) software suite for central management of TPM (Trusted Platform Modules)-equipped PCs in enterprise environments. The Infineon TCMS software lets enterprise customers in midsized and large companies activate and control TPM-equipped PCs. Additionally, the TCMS software suite lets organizations utilize TPM-based security on a heterogeneous PC infrastructure. This enables central control of Windows-based clients within the enterprise. For an all-around hardware and software solution for enterprise professionals needing to protect their client data, the TCMS software suite can be bundled with Infineon's TPM Professional Package Software v3.5.

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■ **iTrinegy** has introduced INE Companion, which provides network analysis with the capture and relay of real-time network conditions. INE Companion goes a step beyond basic emulation and can simulate essential aspects of a live network, including competing traffic and losses. iTrinergy's collected data helps IT managers get a comprehensive view of network usage, as well as a detailed summary of errors, dropped packets, bandwidth utilization, and more.

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■ **Lumeta** has released IPsonar 4.0, which enables organizations to handle both network change and risk management, in addition to compliance imperatives. With IPsonar 4.0, organizations can have complete visibility into network connectivity and behavior. The new version of IPsonar 4.0 includes Integrated LNI (Lumeta Network Index), New SOA (service-oriented architecture), and Open API. Additionally, IPsonar is designed to be easier to use and quicker to discover important network information, such as managed and unmanaged assets. IPsonar 4.0 also includes a new SOA Reporting Platform, which provides increased flexibility, scalability, and performance.

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■ **McAfee** unveiled a service designed to help organizations securely deploy virtualization technologies. Just as with physical

Product Releases

systems, IT organizations using virtualization technologies must focus on people, processes, and technological considerations associated with securing its operations. McAfee Foundstone Professional Services helps enterprises create, deploy, and maintain virtual infrastructure with the highest possible security. Foundstone consultants help identify and mitigate the risk to a virtual infrastructure by reviewing the people, processes, and technology surrounding this virtual deployment.

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■ **Meru Networks** has announced AP302, the first wireless access point that supports legacy IEEE 802.11a/b/g standards but can also be upgraded through a software update to 802.11n draft 2.0 standard. With AP302, organizations will have a migration path to advanced wireless LAN technology that is simple and cost-efficient. AP302 can identify and stop any 802.11n rogues trying to obtain unauthorized access to the WLAN, and the dual-radio AP302 is Meru's fourth access point to incorporate the 802.11n draft 2.0 standard. AP302 comes with the six antennas (three per radio) needed to support 802.11n MIMO (Multiple Input/Multiple Output) technology, so users can save on labor and installation costs when they decide to upgrade their software.

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■ **Tektronix Communications** unveiled the H600 RFHawk, a handheld, digital RF signal hunter that's designed for the surveillance and security market. The H600 RFHawk is a spectrum analyzer with a set of user controls that lets you quickly classify and locate analog and digital RF transmissions. The RF measurements, advanced signal classification, and location tools allow surveillance customers to track down signals that may hamper infrastructure operation or be used for illegal purposes. The battery-operated H600 RFHawk provides field-proven signal hunting, mapping, and documentation tools. There's a touchscreen user interface that allows users to classify known signals and locate unknown signals. The spectrogram mode also lets customers see signal shape through FFT-based spectrum analysis, ideal for burst signals.

Physical Infrastructure

■ New power distribution units from **Tripp Lite** range from a 16-outlet 120V 15A model (the PDUMV15NET) to two 38-outlet 208V dual-15A models (the PDUV30HV and PDUMV30HV, the latter with a digital load meter). Most of the new switched and metered PDUs come with the company's integrated interface, which offers remote control and monitoring of outlets and devices over SNMP, Telnet, or the Internet. Included with the new models is Tripp Lite's PowerAlert network management, configuration, and monitoring software.

Security

■ **Aladdin Knowledge Systems** has released eSafe 6 Feature Release 2, which includes dual antispam engines that offer zero-hour antispam and malware outbreak prevention and enhanced content security. The release combines real-time reputation and deep-content analysis technologies in one dual-engine product, giving users zero-hour spam sender reputation and malware analysis with real-time content analysis, which checks all email against a continuously updated spam and spyware database in any language or email format. Aladdin says the release monitors email traffic globally at ISP and other email-transfer locations in an effort to identify new spam and malware outbreaks when they occur. If an email isn't catalogued in the local spam signature database, eSafe sends and receives a reputation query in real time, blocking harmful senders. Additionally, eSafe's second engine prevents spam on phishing, fingerprint, and fuzzy fingerprint levels. The latest version also strips metadata from Microsoft Office attachments.

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■ **Catbird** has launched VMShield, the latest service in the company's V-Security product family, which also includes HypervisorShield and a V-Agent virtual appliance. Catbird says VMShield is the industry's first dedicated security product that's designed specifically to control and secure virtual machines. VMShield provides automated 24/7 monitoring to virtual machines with targeted focus on protecting their critical data using such services as change control and secondary control validation; automatic quarantine of unauthorized virtual machines; server sprawl management; and network data protection against vulnerabilities, known attack signatures, and virtual machine-to-virtual machine attacks. Catbird says VMShield is also the only service to proactively secure virtual machines from VM-to-VM and Hypervisor-to-VM network threats.

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■ **CipherOptics** has released CEP (CipherEngine Enforcement Point) 10, which provides 10Mbps encryption, ideal for remote offices with low-speed DSL, T1, or 10Mbps connectivity. CEP 10 also supports up to 20Mbps bidirectional IPsec encryption. This product offers network-wide security for all sizes, types, topologies, and speeds of networks and doesn't require an investment in additional management or operational costs.

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■ **Nuance Communications** unveiled an Automatic Password Reset module, which lets an employee reset security passwords for any networked device or application using his voice and the company's telephony system. Automatic Password Reset utilizes voice biometrics that securely identifies the caller in the system and allows for computer and other passwords to be changed, thereby eliminating many of the simple calls to the help desk and freeing them to focus on issues that are more complex. The Nuance Automatic Password Reset module is part of Nuance's EPS (Employee Productivity Suite), a host of solutions aimed at leveraging voice biometrics to make enterprises more efficient and employees more self-sufficient.

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■ **Process Software** has introduced SpyCatcher Enterprise 5.0, which includes a new spyware detection engine for better protection from a variety of threats. Its new Profiling Engine has multiple layers of anti-spyware technology and uses advanced behavioral spyware detection. Version 5.0 also features updates to its Web-based configuration and management interface, and it adds support for mobile computing and Active Directory integration.

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■ **Reconnex** unveiled its Data Loss Profiler, an appliance-based platform that lets security personnel know when any confidential or sensitive data leaves the network. The offering also lets security officials know where the data is going. The Data Loss Profiler enables organizations to locate and shore up weak points in the security plan. Although it is ideally suited to Reconnex Data Loss Prevention solutions, the Data Loss Profiler also supports other data loss prevention offerings thanks to its learning capability. Setup is simple as the Data Loss Profiler automatically learns data loss patterns just by monitoring network interactions. The Data Loss Profiler is available for a seven-day free trial, after which the appliance and all learning applications are available for $19,995.

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Storage — March 7, 2008

Virtual Machines Need Real Protection

NetApp's SnapManager For Virtual Infrastructure Gets It Done

The data on your virtual machines is just as important as the data on your physical servers. But because a virtual infrastructure can change and evolve based on workload balancing or failover requirements, traditional backup and disaster recovery options can be too costly to maintain. These options also often fail to provide adequate safeguards. To address the problem and secure your VMware ESX environment and virtual machines, Network Appliance launched the SnapManager for Virtual Infrastructure.

As the latest addition to the NetApp Manageability Software Family, SnapManager for Virtual Infrastructure incorporates several NetApp technologies into one product that can assist in the creation of automated backups, restoration, replication, and disaster recovery. Components include Snapshot, SnapRestore, and SnapMirror.

Snapshot technology lets users create a point-in-time duplicate of a file system to enable everything from single file recovery to complete disaster recovery. The SnapRestore technology restores files or multiterabyte volumes quickly and efficiently. NetApp's SnapMirror software lets users replicate data across all NetApp storage devices and enable disaster recovery on an efficient and manageable scale.

Storage administrators can virtually eliminate user error by opting to engage SnapManager's automated capabilities. If storage administrators prefer to take matters into their own hands, they can engage tasks manually. For more granular control, users can also incorporate the offering into their existing virtual infrastructure environment policies and create hot backups and rapid restores.

Thanks to the integrated Data ONTAP data protection and the ESX Hot-Backup mode capabilities, users can eliminate time-sensitive backup windows and deliver virtual machine consistent backups. SnapManager saves costs by letting administrators reassign resources once dedicated to and over-burdened by virtual machine backups to other applications as they see fit. SnapManager for Virtual Infrastructure also features an intuitive user interface to make configuration and set up easy for users at any skill level.

NetApp SnapManager for Virtual Infrastructure

A backup and disaster recovery platform for virtual machines

(800) 206-5363

www.netapp.com

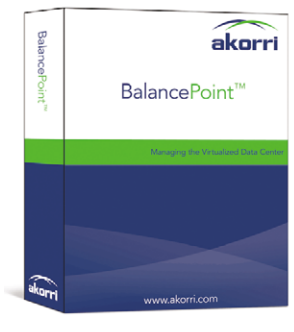
NetApp® Simplifying Data Management

Networking & VPN — March 7, 2008

Better Virtualized Performance

Akorri BalancePoint 2.0 Monitors & Analyzes Resource Usage

To make the most of a company's resources, it is necessary to monitor and manage the resources that make up a virtualized data center. Akorri's BalancePoint software can help do just that with a full set of tools that monitor and analyze the performance and usage of resources.



Akorri's Version 2.0 of BalancePoint, a preconfigured virtual appliance, comes complete with an operating system. New features include GuidePoint PI (Performance Index), Scorecard Reporting, and storage virtualization support.

The GuidePoint PI offers a number of quantitative performance criteria that assists IT in improving data center performance by providing information about the type of storage hardware that is necessary to support application workloads.

Not only can this tool help IT staff improve data center performance, but the GuidePoint PI can also assist in making decisions about future purchases. For example, a PI of 100 indicates that servers, storage, and other components of the company's infrastructure are well suited to the demands of its applications. If the PI is higher than 100, it indicates that the company's resources are taxed. Performance may suffer, so it may be necessary to purchase additional resources for the data center. If the PI is lower than 100, the company might make better use of its extensive resources by consolidating servers or implementing tiered storage.

Another new feature is the Scorecard Reporting tool, which provides performance and usage information for app services, ESX, physical servers, storage components, and virtual machines. BalancePoint also supports IBM SVC and HDS UVM, which lets the software operate across domains and support virtualized servers and virtualized storage.

Akorri BalancePoint 2.0

Starts at $12,500

A virtual appliance that includes a full set of tools for analyzing the performance, usage, and needs of the data center

(978) 431-1200

www.akorri.com

akorri

Product Releases

Continued from Page 19

■ **Secure Computing** launched its SecurityReporter application, a security event management and reporting offering designed for Sidewinder and SnapGear appliances. SecurityReporter is scalable enough to handle data from one to several thousand Secure Computing Network Gateway Security appliances, making it suitable for small, midsized, and large organizations. Security Reporter features template reports and forensic analysis tools that let administrators keep tabs on the firewall deployments and meet compliance regulations. Sidewinder and SnapGear appliances now come with the new offering bundled in at no additional cost.

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■ StoneGate Firewall/VPN, a virtual security appliance for VMware virtual environments, is now available from **Stonesoft**. StoneGate Firewall/VPN is designed to protect the network and ensure business continuity in both virtual and physical network environments. The virtual appliance protects traffic between consolidated servers in virtual environments because they can be installed anywhere in the virtual network, which facilitates security policy enforcement in both the virtual and physical networks.

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■ The Information Anywhere Suite with updated Afaria security, an encryption/decryption software offering for handheld devices, is now available from **Sybase iAnywhere**. The software is intended primarily for use with Windows Mobile technology. Features of Information Anywhere include advanced data decryption, seamless application integration, GPS interoperability, and enhancements to the user interface. The software decrypts data on-demand only, which speeds login times and improves battery life, and can work exclusively with data on mobile devices. Information Anywhere is available for Windows Mobile 5/6, Pocket PC/Professional, and Smartphone/Standard and will likely be available for additional platforms in the future.

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■ **Symantec** Endpoint Encryption gives the enterprise a better handle on security by extending centrally managed, strong encryption capabilities to laptops, removable storage gadgets, and desktop computers. The scalable software prevents unauthorized access and even helps organizations demonstrate regulatory compliance. Symantec Endpoint Encryption is available in three versions to best suit customers' needs.

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■ **TippingPoint** announced the TippingPoint Core Controller, an in-line, network-based appliance that enables 10Gbps of bidirectional traffic inspection by the TippingPoint Intrusion Prevention Systems. Designed to protect network resources, operating systems, and critical applications from malicious threats, the TippingPoint Core Controller is deployed as a "bump-in-the-wire" network element for up to three 10Gbps network links. Traffic entering the Core Controller is intelligently flow-balanced to a bank of TippingPoint IPSes, where traffic inspection and enforcement are performed. Malicious and unwanted traffic is blocked and clean traffic is returned to the Core Controller for distribution to the appropriate 10Gbps egress link. The Core Controller also enables 10Gbps links to be protected by the TippingPoint IPS while ensuring high availability, performance, low latency, and security accuracy.

Servers

■ **Bull** introduced NovaScale VMBox to assist users in simplifying implementation of virtualized infrastructures. NovaScale VMBox provides customers with preintegrated and fine-tuned configurations consisting of servers, storage subsystems, and preloaded software designed to lower deployment costs while simplifying the deployment of new infrastructure. VMBox configurations (Discovery and Enterprise) support VMware ESX Server 3.5. Discovery provides two NovaScale Universal servers (a total of 16 cores), the Bull StoreWay storage system with 2.4TB capacity, and the ability to manage 16 virtual machines. The Enterprise edition of VMBox provides a total of 32 cores, 3.6TB of storage capacity, and the ability to support 32 additional virtual machines.

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■ **IBM** has released the System z10 mainframe, which was built to reduce power, cooling costs, and floor space. System z10 is the equivalent of about 1,500 x86 servers, and it merges x86 software licenses at up to a 30-to-1 ratio. System z10 also features high levels of security and automatic management and tracking of IT resources. The 64-processor mainframe uses quad-core technology and supports a wide range of workloads, such as Linux, XML, Java, WebSphere, and Service-Oriented Architecture implementations. IBM is also looking to include the Open Solaris operating system. Additionally, the System z10 mainframe features authorization and utilization management, virtualization security, and automated provisioning.

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■ Supermicro SuperServers and Server Building Block Solutions with embedded VMware ESX Server 3i virtualization software are now available from **Supermicro**. The Supermicro servers are designed for power efficiency and energy cost savings. The goal of the addition of VMware ESX Server 3i is to add a great deal more memory, storage, and I/O capacity, which helps reduce IT space requirements, resulting in simplified maintenance and management for administrators.

Storage

■ A whole new family of SAS/SATA RAID controllers is now available from **Adaptec**. The Series 5 Unified Serial lineup starts with the 52445 ($1,595), a model with 28 ports (24 internal and 4 external). On the low end is the 5405 ($425), which has 4 internal ports. The PCI-E controllers all feature a 1.2GHz Intel IOP348 I/O processor.

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■ **Atempo** has released Time Navigator 4.2, a backup and recovery program the company says provides greater levels of usability, including easier installations and configurations by midmarket and large enterprise customers. New features in the 4.2 release include a simplified installation wizard, storage device auto-discovery tool, a configuration assistant that helps set up a backup process, and enhanced log and alarm interfaces. Additionally, 4.2 now supports SharePoint 2007 and Novell iFolder 3. The configuration tools let advanced and novice users uniquely customize Time Navigator more easily, while the new installation process lets administrators use Time Navigator's backup and recover features more quickly. Further, Atempo says the software lets midsized and large companies seamlessly manage data throughout its life cycle.

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Product Releases

■ **Brocade** announced the 7500E SAN Router, an FCIP (Fibre Channel over IP) extension for entry-level remote data replication that provides data recovery through remote means for larger enterprises. Brocade 7500E has low initial port density and bandwidth capacity to provide customers with remote disk replication without compromising power supplies and compression. When the need for data replication grows, Brocade provides additional bandwidth upgrades to Brocade 7500 capability, providing investment protection as the company grows. Brocade 7500E is compatible with the entire range of Brocade infrastructure products and is available from Brocade and Hitachi Data Systems.

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■ **Luminex** has announced that it, together with **COPAN Systems**, provides new offerings for virtual tape that are more efficient for write-one/read-occasionally data. The new virtual tape products are based on COPAN Systems' Enterprise MAID (Massive Array of Idle Disks) and combine the Luminex Channel Gateway with Copan Systems' Revolution 300 Series. The new products use less power, run cooler, and consume less floor space than other technologies.

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■ **NetApp** has unveiled storage and data management solutions for Microsoft Windows Server 2008, Microsoft Hyper-V, and Microsoft SQL Server 2008. Users can keep their infrastructure, data, and other applications intact while transitioning to new Microsoft services on physical or virtual environments. NetApp is offering specific features for Microsoft SQL Server 2008 that include cost-effective storage consolidation and migration, application tools for creating copies of SQL Server databases, rapid disaster recover capabilities, data backup through NetApp Snapshot technology, and scale-up/scale-out support for large enterprise data catalogs.

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■ New 3Gbps SAS/SATA RAID controllers from **Promise** aim to increase scalability and flexibility in the data center. The host-based controllers feature external ports: The SuperTrak EX8658 has eight external ports, whereas the EX8654 features four internal and four external ports. Both controllers support RAID 5 and 6. They're targeted toward Linux or Windows servers in the entry-level and midrange brackets.

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■ **Sun Microsystems** has announced a number of additions and enhancements to its products. The open archive portfolio now has a scalable, energy-conscious midrange modular library, the Sun StorageTek SL3000, and the fourth-generation fast-access Sun StorageTek T9840D Tape Drives. Sun Microsystems also announced a multitiered archive appliance, the Sun Customer Ready Infinite Archive System, which is designed to work with Solaris 10 Operating Systems, as well as enhancements to archive data security with the Sun Crypto KMS (Key Management System) 2.0. Also, the source code for the Sun StorageTek 5800 system is now open.

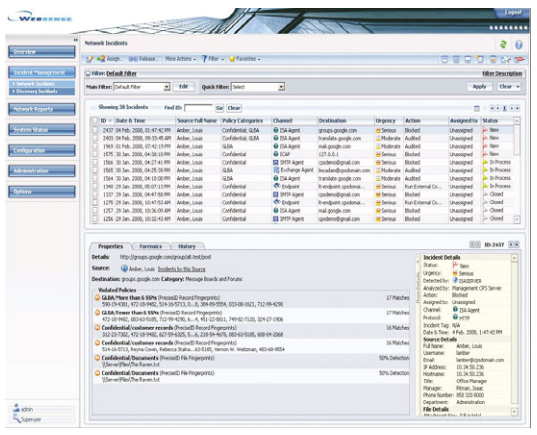
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■ **Toshiba** has announced 1.8-inch SATA hard drives with a high 5,400rpm spindle speed, which bumps up read and write performance. The new 120GB MK1216GSG and 80GB MK8016GSG feature micro-SATA connectors and comply with the SATA 2.6 specification.

SECURITY — FEBRUARY 29, 2008

Help Prevent Data Loss

Websense Data Discover Software Manages Information Flow



Websense Data Discover monitors and tracks information movement through network reporting and incident management.

MONITORING THE MOVEMENT of sensitive data is paramount to maintaining confidence in the security of business information. Organizations should take steps toward securing a data loss prevention program. Websense provides such a tool for developing a safeguard system in its Websense Data Discover software.

As a standalone program, Websense Data Discover supports search options for high volumes of confidential information, identifying and classifying corporate files to ensure the protection of data in motion and data at rest. Information stored on file servers, desktops, notebooks, and portable drives requires detailed categorization and location recognition. Data Discover uses language processing and Websense's advanced fingerprinting technology, PreciseID, to identify these specific forms of data, finding both unstructured and structured data.

With Data Discover, confidential information can be easily found within an organization without sacrificing the capabilities of business processes, letting IT enable safeguard policies and reduce the risk of data loss.

The features found in Data Discover are also in Websense Data Security Suite 6.5 as part of the suite's network awareness procedures. With Data Security Suite, users can configure and map the movement of data with a collection of more than 450 templates. To reinforce data loss prevention, the Data Security package audits the transfer of information to assess workflow risks.

Websense Data Discover

Starts at $8,750 based on the number of users; one- to three-year subscriptions available

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NETWORKING & VPN — FEBRUARY 15, 2008

An Intelligent Switch

ConSentry LANShield Features Programmable Hardware, Deep Packet Inspection Processor

SWITCHES BASED ON legacy architecture may provide the speed your network needs, but because legacy switches typically use architecture that relies on IP addresses, Layer 3/4 ports, virtual LANs, and access control lists, your IT staff must create and maintain a number of local security policies. ConSentry's Intelligent Switching architecture lets switches reference central directory stores, such as Active Directory, to control authentication and user management and track activity based on user and application roles.

ConSentry's LANShield Switch provides a platform to implement the Intelligent Switching architecture. LANShield features application-based QoS at Layer 7; greater control of Web-based application and instant messaging; and LAN visibility



by user, role, server, and file. The LANShield Switch can protect against MAC spoofing and avoid static IP address mapping of Web destinations. The LANShield's embedded application visibility lets it recognize a number of types of data, including file names, Web addresses, and FTP file transfers. The dynamic control of both users and applications helps you roll out LAN services and optimize application performance over the network without reducing network security.

What makes the Intelligent Switch architecture different from legacy switches? For starters, Intelligent Switch hardware is programmable, so you can tell the switch to utilize role-based policies, such as for certified users or specific groups of users, to alleviate the need for IT staff to create and maintain virtual LANs and access control lists. The Intelligent Switch architecture also includes a deep packet inspection processor that can identify applications at Layer 7, rather than just by port number. For each traffic flow, the LANShield Switch identifies the application in use, applies policies based on role, and tracks all activities.

ConSentry LANShield Switch

Starts at $6,995; LANShield OS available as a free upgrade to ConSentry customers with current support contract

Uses ConSentry's Intelligent Switch architecture to provide integrated user authentication and wire-speed switching on your network

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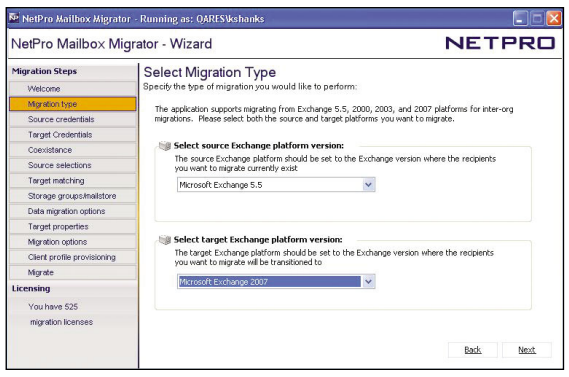
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CONSENTRY NETWORKS

MESSAGING & TELEPHONY — FEBRUARY 29, 2008

Exchange Management

NetPro Creates Comprehensive Suite For Exchange



With NetPro's NetMigrate, migration is a transparent, detailed, and streamlined process.

MICROSOFT EXCHANGE SERVER 2007 is a powerful tool for managing servers, offering a wide variety of possibilities within the business-critical Exchange environment. To meet the need for comprehensive software and services to take advantage of all the possibilities, NetPro Computing has a battery of new products. NetPro has released the first two of a suite of products: NetControl for Exchange and NetMigrate for Exchange.

NetControl is designed to simplify the management of email, producing email usage and storage reports so administrators can justify adding personnel and hardware upgrades. The reports also facilitate capacity and migration planning. NetControl helps administrators control data, eliminate duplicate messages, and archive folders and mailboxes to increase Exchange performance. Restoring email content is also faster with NetControl: The program is designed to eliminate the need to dig through backups for a single email message.

Migration is generally a difficult and sensitive process. NetMigrate for Exchange is designed so that even the smallest email details, such as calendars and appointments, are accounted for. Migration is transparent, so there is no need for agents, schema extensions, or SQL databases, and production never has to cease. Administrators can also take advantage of NetPro Migration Services for expert assistance in deploying the software.

NetPro NetControl & NetMigrate for Exchange

NetControl: $6 per seat; NetMigrate: $18 per seat Maintenance for each product is an additional 20% of its purchase price

NetControl helps administrators manage email, while NetMigrate makes data migration a detailed yet efficient process

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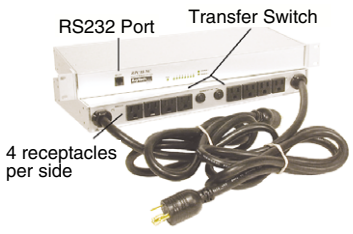
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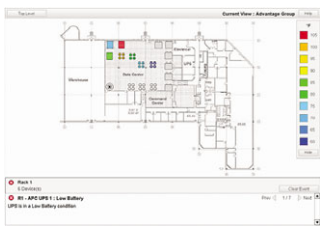
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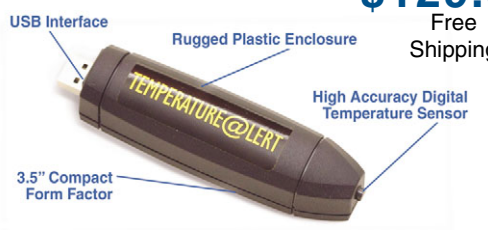
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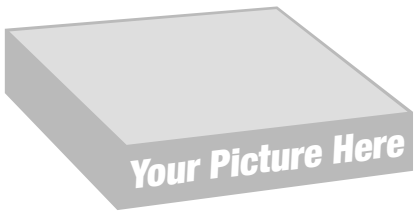
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NETWORKING & VPN

MARCH 7, 2008

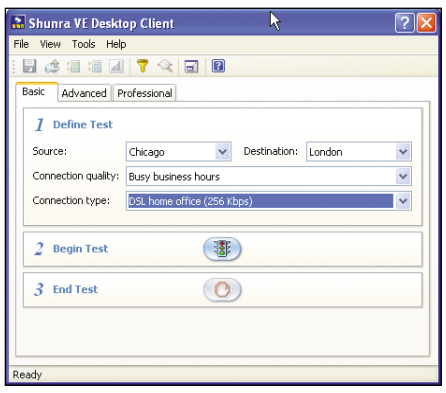
Desktop Network Emulation

Shunra's VE Desktop Standard 4.0 Provides Application Performance Testing

FOR EVERY CODE or app, testing in a lab and testing in a real-world environment are very different processes. The Shunra VE Desktop Standard 4.0 gives users the ability to simulate a variety of scenarios to make their testing more rigorous, saving time and money in the development of applications.

Desktop Standard 4.0 uses a LAN and automatically creates a virtual WAN. When you run tests, this causes apps to act like they're in use by end users on a network. The virtual network possesses prespecified conditions, which you can customize. Network parameters that can be set include packet loss, bandwidth issues, and latency. For convenience and efficiency, you can also predefine test cases before you run them.

Setting real-world-type conditions gives you the ability to see and feel how your applications operate at various stages of the developmental process. You can run tests at every phase of an application's development, which allows you to troubleshoot problems early and continuously. All of the feedback is delivered to the user's desktop.



You can use predefined scenarios to test your applications in a virtual network setting with Shunra VE Desktop Standard 4.0.

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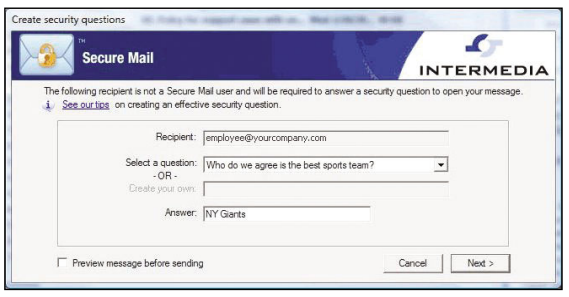
MESSAGING & TELEPHONY

MARCH 7, 2008

Archive & Encrypt Email

Let Intermedia's Secure Mail Do All The Heavy Lifting

EMAIL IS YOUR company's most vital communications resource, yet most SMEs get by without adequate protections in place to safeguard the sensitive and business-critical data that emails contain. Federal and international law dictates how organizations in regulated industries should handle email. But even unregulated industries can face legal consequences if proper precautions are not taken. To solve this problem, Intermedia introduced its Secure Mail SaaS (software as a service) offering for Microsoft Exchange, designed to handle email compliance and encryption needs throughout the data life cycle.



Intermedia Secure Mail's security question ensures only the intended recipient gets your message.

Secure Mail helps organizations comply with mandates passed by the U.S. Securities and Exchange Commission, as well as Sarbox, HIPAA, and recent updates to the FRCP (Federal Rules of Civil Procedure). Secure Mail's encryption scheme also prevents data loss that can lead to lawsuits.

As a SaaS, Secure Mail lets users sidestep deployment, integration, and management concerns and costs that plague traditional PKI (Public Key Infrastructure) encryption platforms.

When users send emails via Secure Mail, they lock the messages with a password question and then Secure Mail encrypts and sends the message. At that point, Secure Mail subscribers can view the email in Outlook where it is automatically decrypted and opened. For nonsubscribers, the email shows up with a link to Intermedia's servers. Upon entering the correct password from a secure Web connection, Secure Mail opens the email in Outlook and archives it for compliance. Using this unobtrusive method, Secure Mail recipients can view emails without installing Intermedia's software.

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PHYSICAL INFRASTRUCTURE

MARCH 7, 2008

Environmental Control

Dickson's Graph-At-A-Glance Monitors Temperature & Humidity

MAINTAINING ACCEPTABLE operating conditions is essential in order to ensure not only that hardware operates properly but also that equipment is not unnecessarily taxed so that a company can get the maximum life span from its data center resources. Dickson's latest data loggers can help ensure that hardware operates under ideal conditions.



The company's new Graph-at-a-Glance Flat Panel Temperature and Humidity Data Loggers provide real-time feedback to a company about environmental conditions. With the new data loggers, IT personnel can easily oversee and manage the temperature and humidity in a company's data center.

These new products from Dickson are paperless chart recorders with integrated digital graphing tools that provide a visual representation of environmental conditions and patterns that may have a detrimental effect on a company's hardware and data. Each Dickson data logger has a 3.4- x 4.5-inch display for easy viewing. The products also provide options for users to configure the display settings.

The Graph-at-a-Glance Flat Panel Temperature and Humidity Data Loggers offer both audio and visual alarms to notify IT staff immediately when there is a problem with the environmental conditions in the data center.

The Graph-at-a-Glance Data Loggers have 32KB of built-in storage capacity and also include support for additional flash memory. They offer USB-enabled triple-speed downloading. With these products, IT personnel can download temperature and humidity data so that they can not only monitor conditions but also perform further analysis of the data center's environmental conditions.

Dickson provides two models that monitor both temperature and humidity, the FH320 and FH325, and two models that monitor only temperature, the FT300 and FT325. In addition, any of the models are also available with Dickson's Basic N100 1-Point NIST Calibration for an additional $99. NIST Calibration provides accuracy and regulatory compliance for the data loggers.

Dickson Graph-at-a-Glance Flat-Panel Temperature And Humidity Data Loggers

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Data loggers that monitor and evaluate environmental conditions in data centers

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PHYSICAL INFRASTRUCTURE

MARCH 7, 2008

Eliminate Air Recirculation Problems

HotLok Blanking Panels By Upsite Provide Effective, Durable Seal



KEEPING DATA CENTER EQUIPMENT cool is likely a top priority in your enterprise. And the situation is only going to become more essential in the near future.

One way to help is by preventing recirculation problems in your IT equipment cabinets with products such as the HotLok Blanking Panel from Upsite Technologies. HotLok provides a highly effective sealing solution for above-the-floor air recirculation problems in equipment cabinets.

The patent-pending HotLok Blanking Panel is engineered to provide a highly effective, durable seal. It features cantilevered sealing vanes that eliminate the gap between adjoining blanking panels or with installed equipment. Its ergonomically designed finger grips make tool-free installation and removal easy, safe, and fast.

HotLok Blanking Panels are engineered to stack anywhere in the server room They require no particulate-emitting containers for storage and are made of fire-resistant, recyclable, RoHS-compliant plastic.

HotLok Blanking Panels are available in 1U and 2U sizes to fit 19-inch EIA 310-E-compliant mounting rail widths with either round or universal square openings. Each size can be purchased with or without a liquid crystal Upsite Temperature Strip. The Upsite Temperature Strip displays Celsius and Fahrenheit temperatures. The red, yellow, and blue ranges on the indicator bar demonstrate levels of temperature operation based on ASHRAE and equipment manufacturers' standards for equipment air-intake temperatures.

The HotLok Blanking Panels offer:

- Elimination of exhaust air recirculation within the cabinet, allowing for optimized cooling, lower energy consumption, and reduced operating expenses
- Reduction and stabilization of equipment air intake temperatures
- Reduction of the number and severity of hot spots within equipment cabinets
- Increased equipment availability, performance, and reliability
- Potential for greening data centers

Upsite Technologies HotLok Blanking Panel

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iProductive In The SME?

Analysts Weigh In On The iPhone For The Enterprise

by Sandra Kay Miller

• • •

Although AT&T announced companies could have their employees' iPhone charges directly billed to the corporate rate plan, analysts don't see a mass roll-out of one of the hottest wireless devices of last year. Some industry experts say the iPhone could be a good fit for small to midsized enterprises, while others think it has no place in the SME.

"Right now, Apple's brand does not extend into the enterprise," says Avi Greengart, mobile devices research director at Current Analysis (www.currentanalysis.com). "If you're an IT manager and thinking about what type of phones you are going to pay for, the iPhone is not going to be at the top of that list."

With 4 million devices sold since its introduction last year, Apple (www.apple.com) has announced a sales goal of 10 million iPhones by the end of this year. Despite Apple's inability to crack into the enterprise market, Canalys reports that Apple holds the No. 3 spot in the smartphone market as of the last quarter of 2007.

Not Ready For The Enterprise?

As it stands today, the device raises red flags for conscientious IT managers. "There is very little device management and security control available for the iPhone. It must be activated using iTunes, and if the battery fails, the device needs to be shipped back to Apple," says Sean Ryan, research analyst for mobile enterprise devices at IDC.

The iPhone does support VPN access but falls short of support for enterprise-class security protocols.

Greengart lists another drawback for the iPhone: "It doesn't support secure push-email the way that Windows Mobile or RIM BlackBerry devices do." That means some popular mobile email solutions don't support the iPhone.

However, later this year, IBM (www.ibm.com) has plans to release a Lotus Notes email platform for Apple that could help boost the iPhone's adoption in the enterprise.

As with early mobile devices that entered the corporate network through the back door, iPhone users can link their enterprise email via a third-party Web mail service such as Gmail or Yahoo! Mail. The iPhone does support IMAP (Internet Message Access Protocol), but many enterprises do not use the protocol on their networks due to security risks.

In a *Wall Street Journal* article just prior to the release of the iPhone, Ranjan Mishra, a director at business consulting firm Oliver Wyman in Boston, speculated that "Apple may face pressure from iPhone customers to make the devices more compatible with their corporate email systems." Mishra also said, "They [Apple] should focus on the white-collar traveler segment who would like a nice storage device and some music and a corporate cell."

Although Apple hasn't partnered with Microsoft (www.microsoft.com) or RIM (www.rim.com) to enable the iPhone to support a virtualized environment, such as the Parallels software (www.parallels.com) that allows Microsoft Windows to be run on a Mac, Apple has announced an SDK (Software Developers Kit) for the iPhone.

Both Greengart and Ryan believe that the introduction of the SDK could help Apple clear the initial hurdles of breaking into the enterprise, but that remains to be seen with what types of applications are created to aid the integration of the iPhone with corporate infrastructure.

Another significant roadblock for large-scale enterprise deployments is the price. With a list price of $399 (8GB) and $499 (16GB), the iPhone is considerably more expensive than popular enterprise mobile devices such as RIM's BlackBerry Curve 8310, Motorola's Moto Q (www.motorola.com), Palm's Treo 750 (www.palm.com), and Samsung's Blackjack (www.samsung.com).

At this point, Greengart deems the iPhone as a Web-enabled iPod phone. "It's hard for me to imagine IT managers buying iPods for their employees, unless it's a reward for a job well done."

The SME Factor

But that doesn't necessarily write off the iPhone as a legitimate business tool. "SMEs (particularly if privately held) are not as regulated as large enterprises, are less likely targets for security breaches, and thus are less security-conscious," says Ryan. "They are also more likely to use a device like the iPhone from a productivity perspective, simply for PIM and nonsecure mobile email. Incidentally, this is the dominant usage scenario for those using the iPhone in large enterprises, too."

Greengart currently sees small businesses, especially sole proprietorships, turning to iPhones. One such small business is Kelley Campaigns (www.kelleycampaigns.com), a public relations firm in Washington, D.C. "We were already an all-Macintosh shop, so it's only natural," says Senior Associate Tom Kelchner, who uses his for phone and email communications, Google Maps, and calendar and alarm functions.

Keeping with the Apple brand allows Kelley employees to wirelessly sync their phones with their computers. "It's just very useful. A lot of work is done on the road. We're in downtown D.C., at conferences, working on the train and working remotely with clients," says Kelchner.

Kelchner has also discovered an advantage the iPhone has over traditional mobile phones—no inadvertent pocket dialing. "There are no buttons on it that get pushed in your pocket to turn it on, off, or accidentally call someone."

The touchscreen and wireless Web-browsing has set the bar for mobile devices and has touched off new smartphone designs.

Apple sees an upcoming generation of business users who will want the functionality of phone, Web access, storage device, and music/video player in a single unit.

What's Holding Back The iPhone From SMEs

Security: It doesn't include over-the-air management or secure-push email.
Lack of QWERTY keypad: Heavy mobile users want their buttons.
Support issues: It has limited support for Exchange, no support for BlackBerry, and limited support for third-party application integration.
Nonremovable battery: Devices have to be returned to the manufacturer for battery replacement.
Price: It's considerably more expensive than currently available wireless devices.

Storage March 7, 2008

Scalable, All-In-One Storage

StoreVault S550's Simplicity Lets You Concentrate On Business



Today's small to midsized enterprise needs to be able to focus on one thing: growing their business. The S550 from StoreVault, a NetApp division, has that need in mind.

StoreVault's S550 includes a new chassis that can support drives from 250GB to 1TB, so you can start with as little as 1TB of storage and grow up to 12TB, as your business needs change, without having to add additional boxes or complexity. Support for both NAS and SAN lets you set up the S550 as a file server replacement or server virtualization platform.

The S550's embedded NetApp FlexVol technology means you can simply allocate and reallocate storage on the fly. And you can add storage—even as little as one drive at a time—without disrupting applications or users.

One of the best features of the S550 is that you can set up and configure the device in a matter of minutes, and you can easily manage, monitor, and update your storage without the need for storage specialists. The S550 supports all major vendors over multiple protocols.

The StoreVault Advanced Protection Architecture means your data is secure, and it uses technologies to ensure maximum availability. Plus, you can eliminate the headache of daily incremental backups. The S550's use of snapshots reduces your backup window and makes it possible to restore entire volumes by just touching a button. Snapshots can be integrated directly into Exchange and SQL applications, and you can even replicate files and LUNs to a remote S550 for offsite backup.

StoreVault S550

Starts at $5,535

Scalable storage designed with simplified management and data protection features

(877) 278-7858

www.storevault.com

StoreVault™ A NetApp Division

Security March 7, 2008

Intel Core 2 Duo-Based Network Security Platform

American Portwell NAR-5520 Features Server-Class Performance, Compact Size



Today's enterprises face increasing pressure to implement products that ensure high computing power and low energy consumption, all while keeping the price in check. Those factors are especially important when it comes to mission-critical applications such as network security and firewalls.

American Portwell had those issues in mind when developing its NAR-5520 communications/network security platform. The NAR-5520 1U CA platform is designed for enterprise network security, firewall, WAN optimization, antivirus server, unified threat management, media gateway, and triple-play broadcasting setups.

The Portwell product uses the Intel 945G chipset with 1066/800/533MHz FSB, so it can run LGA775 socket processors, including single- and dual-core CPUs such as the Intel Core 2 Duo, Celeron D, Pentium D, and Pentium 4. The integrated system fits within a 1U chassis while still allowing the use of 3.5-inch hard disk drives and/or a removable hard drive by using the optional project base.

American Portwell created the NAR-5520 to be easy to install, use, and maintain, with a load factory default mechanism. It features front access Gigabit LAN ports for user-friendly maintenance and a 2x16 LCD module with four buttons for easy installation and operation. LEDs indicate power status, data access, Ethernet status and speed, and bypass status.

Other features include:

- Up to 10 Gigabit Ethernet ports with two built-in bypass segments (six standard)
- Up to 4GB DDR2 667/533/400 RAM
- Two optional PCI expansion slots
- One 3.5-inch hard disk drive (up to two can be installed)
- Optional crypto solution
- One front-accessible RJ45 console connector

American Portwell NAR-5520

A communications/network security platform designed for enterprise network security, firewall, WAN optimization, and other scenarios

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Portwell

Web Services Companies Focused On The SME

On-Demand Services From Large Compute Clouds

by Kurt Marko

• • •

For many enterprises, managed services have become a preferred means of deploying Web-based content and applications, combining low up-front acquisition costs with the convenience of outsourcing tedious server administration and maintenance. Yet for all but the simplest Web sites, MSPs (managed service providers) have typically required customers to procure processing and storage capacity in discrete units of a particular type of server over a set contract period—necessitated by the difficulties of partitioning, sharing, and allocating server resources among different customers.

Early in the decade, large systems houses made headlines touting a new model of shared computing known as utility, grid, on-demand, or cloud computing. However, actual implementations fell short of the vision. The intervening years have witnessed progress in several key areas—server and storage virtualization, Web-based software development, and large-scale systems management—that have converged to start delivering on the dream of cloud computing.

The growing adoption of the SaaS application model is fueling acceptance of Web-based application services, according to Jeff Kaplan, principal at THINKstrategies (www.thinkstrategies.com). "IT departments are more comfortable using Web-based applications," he says, a change in attitude that makes other on-demand services seem less risky. Concomitantly, Kaplan notes, "developers have devised technologies to resell computing power in a cost-effective and manageable fashion."

Advantages Of Cloud Computing

The main appeal of on-demand services are cost and flexibility. Tapping into a compute cloud entails minimal startup costs and no long-term commitment, says James Staten, analyst at Forrester Research, making compute clouds ideal for SMEs. Furthermore, he notes, "once you drop a service into the cloud, you see all cost increments as usage increases," financial transparency that is important to firms trying to control IT spending. Similarly, the financial model of on-demand services means that customers only pay for what they use and can tap into additional capacity should their needs grow. Customers don't worry about hardware provisioning if their application demand explodes because the compute cloud can dynamically allocate extra resources. Staten notes that for most of these services, the cost curve with increased usage scales linearly.

The other obvious benefit of cloud computing comes from procuring reliable, secure infrastructure from hosting experts. Building and maintaining large online data centers is a core competency of the major players in this market, and Kaplan says that compared to most internal IT departments, cloud providers almost certainly have higher availability.

Types Of Offerings Available

A precise definition of just what constitutes on-demand or cloud-based services is still in flux as the industry is in the early stages of what could be considered disruptive innovation. Staten says that this new generation of IT services insulates users from the underlying hardware and even OS.

Within the abstract notion of a service, however, Staten says there is a spectrum of offerings that appeal to various IT requirements. He sees some services, such as online storage or virtual servers targeted to server administrators looking to the cloud for raw infrastructure capacity.

SaaS offerings such as databases, online storefronts, payment processing, CRM, and other vertical applications are increasingly migrating to on-demand infrastructure and occupy a middle layer in the spectrum of cloud-based services. Finally, Staten notes that the cloud is increasingly becoming a high-level software development environment, as evidenced by the functionality Google (www.google.com), Amazon (www.amazon.com), and others expose via SOAP or other Web-based APIs in their server environments.

Kaplan points out that large providers are creating a services ecosystem by encouraging developers to build service modules or widgets that other users can then use as building blocks. He also notes that the way compute clouds facilitate this sharing of tangible code, but also usage experiences and best practices, fosters a sense of community.

Kaplan says enterprise and entrepreneurial users are most aggressively adopting on-demand computing. Enterprise customers are typically "large IT departments using Web services as their development sandbox," says Kaplan. Entrepreneurial customers are start-up companies that Kaplan says are often short on cash and use Web services as the foundation for a new business.

Issues To Consider

Siamak Farah, CEO of InfoStreet (www.infostreet.com), cautions potential customers of cloud infrastructure to investigate their supplier's competence in running and maintaining large data centers. He says users should be wary of smaller companies that see compute clouds and on-demand virtual servers as a means of renting out some of their own excess capacity. In addition, even large IT providers have occasional blackouts.

On-demand Web services are a long-promised technology that is now truly starting to disrupt the IT landscape, affecting everything from server and storage hosting to application delivery. With giants such as Amazon, Google, EMC (www.emc.com), and IBM now making their vast infrastructure available to a variety of Web-accessible services, compute clouds are just beginning to reshape the way businesses access IT services.

Kaplan finds that with the convergence of SaaS and compute clouds, "utility computing is coming full circle" and starting to fulfill its initial promise. For SMEs and start-ups, on-demand services are an easy, flexible, and cost-effective way to build a virtual infrastructure and tap into some of the most sophisticated and best-run data centers available.

Sample On-Demand Web Services

Company/URL	Service Description
Amazon Web Services **www.amazon.com**	EC2 (Elastic Compute Cloud), S3 (Simple Storage Service), FPS (Flexible Payments Service), and SimpleDB are a set of on-demand virtual computing, storage, and Web application services built on Amazon's scalable infrastructure.
IDrive **www.idrive.com**	IDrive Pro is online backup for small businesses with very large backup needs; it also includes the ability to create and manage multiple accounts for SMEs.
Joyent **www.joyent.com**	Accelerator for Applications provides a highly scalable on-demand infrastructure for running Web sites, including rich Web applications written in Ruby on Rails, PHP, Python, and Java.
Layered Technologies **www.layeredtech.com**	Grid Layer provides on-demand processing using 3tera's AppLogic OS.
Mozy/EMC **www.emc.com**	MozyPro/MozyEnterprise is an online backup service supporting PC clients, Windows servers, network-attached drives, and SQL or Exchange databases.
Rackspace **www.rackspace.com**	Virtualized Dedicated Servers use VMware to build infrastructure (with no shared components) that's flexible, quickly deployable, easy to manage, scalable, and highly available.
Terremark **www.terremark.com**	Infinistructure uses on-demand virtualization technology to move applications across physical infrastructure according to hardware load and performance.

Sample On-Demand Pricing

Amazon EC2 Servers

Server Instances

- Small (one EC2): 10 cents per hour
- Large (four EC2): 40 cents per hour
- Extra Large (eight EC2): 80 cents per hour

Pricing is per instance-hour consumed for each instance type. One EC2 Compute Unit provides the equivalent CPU capacity of a 1 to 1.2GHz 2007 Opteron or 2007 Xeon processor. This is also equivalent to an early-2006 1.7GHz Xeon processor.

Amazon S3 Storage

- 15 cents per gigabyte per month of storage used

Data Transfer

- 10 cents per gigabyte—all data transfer in
- 13 to 18 cents per gigabyte—data transfer out (18 cents for first 10TB; 13 cents for all over 50TB)

Source: Amazon Web Services

More Security, Not Resources

Webroot's E-Mail Security SaaS Helps Keep SMEs Safe

Email is a primary means of communication in the workplace. It can also be a source of viruses and massive amounts of spam. It takes time and effort to manage unwanted email and can occupy valuable personnel. Webroot's E-Mail Security SaaS (software as a service) provides the means to manage and secure email without the need for additional hardware, software, or manpower.

Benefits of E-mail Security SaaS include low cost, easy implementation, and real-time, on-demand reporting. The service protects against all known viruses and 98% of spam. Support is available 24x7x365 with a 99.999% uptime guarantee.

Features of the service include antivirus and antispam protection, which is facilitated by five best-of-breed engines that detect viruses quickly. Zero Hour filters to prevent exposure while identifying threats and seven different levels of spam protection combine to catch 98% of spam.

With Managed Encryption Service using Transport Layer Security, the service encrypts email at even the desk-to-desk and peer-to-peer levels. Inbound and outbound rules can be set to manage content and event-based email, and rules can be customized for specific occurrences or general traffic flow. The image protection features built into the service specifically target offensive or distasteful images that could find their way to an employee's inbox. Every image is scanned, and if the resulting data matches that of any known salacious images, the email will be logged and either deleted or quarantined.

For the sake of continuity, up to 28 days of inbound and outbound emails will be retrievable from secure, mirrored data. This data can be accessed via Webmail, which allows users to access and send the data from any browser, whether in or out of the office. With the Webroot E-mail Security SaaS, all email is archived in data centers in different geographical locations for recovery in the event of a disaster.

Webroot E-Mail Security SaaS

Standard Bundle: $2 to $2.25 per seat per month; Advanced Bundle: $2.75 per seat per month

Security service that protects a network from viruses and spam while protecting and storing data

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The Search For Enterprise Search

Products Vary In Capacity, File Support & Search Options

by Sue Hildreth

• • •

Most organizations, whether small or large, possess a growing volume of electronic content—text documents, images, Web pages, PDFs, audio clips, data, and email messages—stored on an array of desktops, laptops, servers, and storage arrays. In many cases, all of an organization's operating data and documents are in the form of digital files. Locating specific files amongst the terabytes of content scattered across the enterprise is often a major headache.

IT and business managers increasingly see the need for a good enterprise search application to help them locate and manage all that diverse content.

For nearly every search need today, there is a product to match. A wide range of search applications are available, from somewhat generic products with simple keyword searches to high-end applications with sophisticated search options and support for all sorts of file types and data sources. Many specialized niche products are aimed at specific industries or types of searches, such as for law enforcement, health care, finance, government, or pharmaceutical research.

Before selecting a search product for your enterprise, it's critical to hone your list of requirements and develop a short list of product candidates based on those core criteria.

Essential Search Features

Susan Feldman, an analyst for IDC, says some basic considerations for a small to midsized enterprise should include quick implementation, good customer support, and user-friendliness. Some other features that Feldman points to as important in a quality enterprise search product are tunable relevance so that users can tweak rankings based on their view of what is a good result, text analytics to find patterns and concepts in unstructured text, and support for audio and visual content.

She also recommends good security down to the document level. That blocks someone from accessing a secured document that comes up in a search results list. If the search application recognizes user permissions and security access rights before the user does the search, it will block the document's title and abstract from appearing even in the results list. Some applications may offer security at the sub-document level, blocking parts of files that a user doesn't have the right to access but allowing others to be viewed.

Category and concept grouping is a key feature, says Feldman. For instance, if you're searching on ice cream, you might want to see frozen yogurt or other desserts. Categorization allows authors to identify categories for each piece of content.

Before selecting a search product, it's critical to hone your list of requirements and develop a list of candidates based on those core criteria.

Support for a variety of formats is critical. Today, content comes in all shapes and sizes, including database data, text and PDF documents, images, email, video, instant messages, and Web pages. Search products vary in what types of content they will search and what data sources they can index. Some products, for example, can only index Web pages, not database data or multiple documents within a single file, such as a ZIP file. A search product should be able to handle every type of content that an enterprise needs to make searchable.

Likewise, many search applications don't handle audio or video clips, although AV content is becoming much more common in organizations. A few vendors are beginning to. For instance, Coveo (www.coveo.com), which sells the Coveo Enterprise Search application, recently announced a new Audio Video Search add-on module. The add-on product creates a transcript of the audio, which can then be searched for key words. According to Jim Waters, director of marketing for Coveo, that is very useful for searching sales presentations, conference calls, meetings, and so forth. "It's an up-and-coming feature," says Waters, noting that only recently have customers begun wanting to make events such as customer service calls, Webcasts, and recordings of meetings searchable.

Factors To Consider

You should keep a number of other factors in mind as you're selecting an enterprise search package, including the following.

Index capacity. "If you have 10 million documents you need to search, you don't want to be limited to 10,000," notes Elizabeth Thede, vice president of sales for dtSearch (301/263-0731; www.dtsearch.com), maker of the dtSearch Engine and dtSearch applications for desktop, Web, and internal networks.

Available APIs and connectors. To integrate the search product with other enterprise applications, you'll need APIs for each of those other applications. Likewise, if you want to be able to search different data sources, you'll need connectors to those repositories and business applications, says Feldman.

Specialized search capabilities. You can get a basic plug-and-play search product, often sold as a hardware device, but often organizations in specialized industries need very specific types of search functions. In that case, plug-and-play won't fill the bill. Some specific functions that might be needed include:

- **Forensics search.** "If you are searching in a forensic capacity, you need to make sure the application can search corrupted binary data recovered from a hard drive," says Thede.
- **Credit card searches.** "Anther popular usage is searching for credit card numbers and email addresses," Thede notes. "There are search applications with sophisticated checks and pattern recognition to ensure that it's a credit card number."
- **OCR text support.** Another possible function that you might need is the ability to handle hidden text in an OCR (optical character recognition) document. When a document is scanned, it's common to also run it through an OCR reader and file the OCR text or "hidden text" available with the PDF copy. A search engine that supports hidden text will search the OCR text for key words and bring up both versions in a results list.

Customer service. Finally, it's important to check out the customer service of the vendor to see how knowledgeable the employees are on the product and how quickly they respond to an inquiry. Bringing a product in for a proof of concept or pilot project can give you some idea of the quality of customer service, as well as whether the product is suitable to your needs.

And, as with any major software investment, you want a vendor that's likely to be around for another year or two, says Feldman. "I'd want to know that I'll be able to get customer service next year—are they in this for the long haul?"

A Sampling Of Enterprise Search Vendors

Vendor	Products	Contact Info
Autonomy	IDOL Server, IDOL Enterprise Desktop	www.autonomy.com
Coveo Solutions	Coveo Enterprise Search 5	www.coveo.com
dtSearch	Desktop with Spider, Network with Spider, Web with Spider, Publish for CD/DVDs, Engine for Linux, Engine for Win & .NET	(301) 263-0731 www.dtsearch.com
Endeca	Endeca for Website Search	www.endeca.com
FAST Search & Transfer	FAST ESP, FAST Active Mobile, FAST PSP, FAST Unity	www.fastsearch.com
Google	Google Mini Search Appliance, Google Search Appliance, Google Desktop for Enterprise	www.google.com/enterprise
Microsoft	Microsoft Search Server 2008, SharePoint Server 2007	www.microsoft.com
Open Text	Livelink ECM Discovery Server	www.opentext.com

Power Distribution Closer To The Load

Liebert FDC Can Be Positioned Within A Row Of Racks



The Liebert FDC from Emerson Network Power provides the flexible power distribution your data center needs in a standalone cabinet that fits within a standard rack footprint. You can place the cabinet by itself or among other rack enclosures in virtually any location within a row of racks. This so-called "in-rack" location means your power distribution is closer to the load and reduces the need for vast amounts of under-floor cabling.

The newest 480V version of the Liebert FDC brings higher voltages right to the rack, letting you take advantage of new high-density servers that can handle 480V. And because UPS output can be sent directly to the servers without being converted to 208V or 120V, you eliminate lost energy.

With 84 poles (two panelboards), the Liebert FDC helps ensure you won't run out of circuit breaker poles before reaching rated capacity. You can access panelboards individually through hinged access covers, performing any service without exposing the other panelboards.

The standard FDC offers front and rear access and a bottom cable exit; a top cable exit is optional. Local and remote power monitoring capabilities are available, including an Enhanced Monitor with Modbus RTU, Liebert Distribution Monitoring for main and branch circuits, and a current monitoring panel. It also features EZ-view doors and bolt-in or plug-in Square D or GE panelboards.

Emerson Network Power Liebert FDC

Starts at $9,000

A flexible power distribution product that fits within a standard rack footprint and can deliver up to 480V of power

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SIX QUICK TIPS

Find The Right KVM Setup

by Robyn Weisman

• • •

Server rooms become more crowded, and server setups themselves become more complex with the advent of so many physical and virtual configurations. So finding the right KVM takes more thought than it ever has. Here are some tips to help you choose the right KVM setup for your SME.

Understand The Demands Of Your Network

Paul Eiler, sales manager at KVM supplier ATEN (888/999-2836; www.aten-usa.com), suggests you ask yourself the following questions before buying any KVMs: How many servers will your KVM solution manage? What kinds of platforms and interfaces do these servers have? How are these servers deployed? How many IT administrators will manage these servers? In what ways do these administrators plan to access the servers? Do they plan to access them remotely or inside the server room? What kinds of problems do you hope to solve with new KVMs? What is your expansion plan for your server room?

You should ask potential KVM vendors for their suggestions on your specific needs and recommendations of appropriate KVM switches, Eiler says. Then choose the setup that works best for your organization.

Consider Your Long-Term Goals

"As the number of users, servers, and network devices grow in your data center, your system should easily expand with your business because one thing is certain—your network will grow and change," says Mark Nicolas, KVM product manager at Avocent (www.avocent.com). And as it does, you will want a scalable and reliable solution that can accommodate a growing number of simultaneous users without needing to restructure its internal architecture, he says.

According to Nicolas, make sure your KVM supports more than two remote user paths, as this will provide increased data center efficiency and prevent blocked access to mission-critical servers and devices. A centralized management platform can help with these efficiencies, as well, Nicolas says.

For his part, Brett Sexton, security consultant at systems solutions provider and consultancy firm Sindel (www.sindel.com), says that given the desire to consolidate the number of KVMs in the data center, you want a KVM setup that won't require you to add more KVMs or force you to replace this new system altogether.

"There are models that range from controlling two servers all the way up to 1,024 servers by cascading multiple KVMs," says Sexton. Other options to look for are the number of concurrent remote connections. "Some models will allow only one remote user to authenticate and access any server at a time, while others have unlimited remote users," he says.

Reduce Your Security Risks

According to Nicolas, KVM-over-IP solutions enable you to lock servers away in the server room, giving unauthorized users less opportunity to get inside because the servers can be controlled remotely. This security also gives you a return on the investment by minimizing the time and money spent going to the data center.

In addition to physical security, Nicolas recommends a KVM system that leverages your existing centralized authentication system to assign individual or group user rights. "Security can be enhanced by integrating your KVM system into a centralized management platform that adds features, such as exit macros that automatically log out each user when a KVM session is terminated for any reason and activity logs that let you know who, when, from where, and what your IT staff has accessed," says Nicolas. "This valuable information provides detailed audit reports for HIPAA and Sarbanes-Oxley compliance."

Check Out Mouse Sensitivity & Synchronization Capabilities

"Mouse sensitivity is the biggest problem with most KVMs, especially KVM-over-IP [systems], and so you always want to make sure that you can adjust the mouse sensitivity," says Sindel's Sexton.

Richard Dominach, senior project manager at server and networks solutions provider Raritan (732/764-8886; www.raritan.com), concurs that KVM-over-IP users complain frequently about the mouse cursor failing to synchronize with that of the local desktop. Dominach says that unless your KVM-over-IP solution offers automatic synchronization capabilities, you will have to fix the problem by manually setting the mouse parameters on each server.

For his part, Sexton recommends getting a demo of any KVM you are considering to test mouse sensitivity. "Even the best KVM vendors have issues with sensitivity," he says. P

BONUS TIPS

Make sure you can physically connect your servers to your KVM. Brett Sexton, security consultant at Sindel (www.sindel.com), points out that most current servers do not offer standard PS/2 connections, even though most KVM manufacturers still provide PS/2 connections. "If the manufacturer has PS/2 cables and your servers only have USB ports, make sure you have USB-to-PS/2 adapters for each server that will be controlled," he says.

Replace multiple older KVM switches. Richard Dominach, senior project manager at Raritan (732/764-8886; www.raritan.com), recommends replacing multiple older KVM switches with a 16-, 32-, or 64-port switch. "By managing more servers per switch, companies can reduce maintenance costs, as well as save on power, cooling, cabling, and rack space," Dominach says. "By right-sizing your KVM switch, you reduce installation and lifecycle costs."

Best Tip:

Choose Next-Generation KVM-Over-IP Technology

"Many people that I talk to have multiple small 4- and 8-port KVM switches that they have purchased over the years from different manufacturers, resulting in a KVM hodgepodge," explains Richard Dominach, senior project manager at Raritan (732/764-8886; www.raritan.com). These older types of setups may work when everything is going smoothly, but if a server crashes or is hung up after hours, you may discover to your dismay that the only way to fix the problem requires a trip to your data center.

Therefore, Dominach recommends using KVM-over-IP switches that provide both at-the-rack and remote IP access. "These switches have user interfaces that deliver a consistent user experience whether working remotely or at the rack, making it easy to navigate," he says.

KVM-over-IP technology also provides virtual media support, which is useful for installing software, transferring files, and performing diagnostics on a remote sever. "They enable you to power-cycle remote servers without having to take a trip to the data center," Dominach says. "With KVM-over-IP switches, you can access servers from your desktop, while in a meeting, at home, and when traveling, helping to save time and improve uptime."

Devil's Advocate Tip:

Consider Other Options

Because KVMs use a graphical interface, there is no way to see what someone is doing to a remote machine, says Bill Johnson, CEO of TDI (www.tditx.com), which has supplied infrastructure management solutions to Bank of America, the National Security Administration, and the CIA, among others.

"You can tell when someone is authorizing a KVM switch, but you can't audit what that person is doing to the machine," Johnson says. "Our customers are not allowed to use KVM because the government auditors determined they are insecure. We have several firms where people were fired for installing them."

According to Johnson, KVMs started with the Windows side of the server world. However, Windows, like Linux and other flavors of Unix, can be controlled via a serial port and CLI (command-line interface). Server manufacturers, including IBM (www.ibm.com) and HP (www.hp.com), offer their customers best practices on how to manage servers through a CLI.

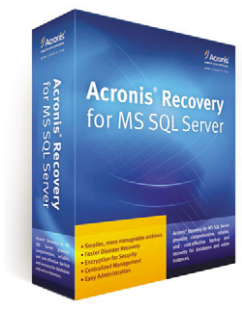
Johnson recommends exploring the Distributed Management Task Force's Web site at www.dmtf.org for more information on this topic.

Make sure your KVM supports more than two remote user paths, as this will provide increased data center efficiency and prevent blocked access to mission-critical devices.

Storage January 25, 2008

Secure Database Backup

Acronis Recovery Makes It Easy To Back Up Your MS SQL Database



Every company must ensure that its database backups meet regulatory requirements while also being easy to manage, maintaining space efficiency, and retaining the ability to be restored quickly if needed. Acronis Recovery for MS SQL Server helps companies meet these requirements.

Recovery gives IT managers and database administrators the ability to securely back up and recover databases, including tables, logs, and other components. It has the ability to recover from a point just before a failure or disruption without loss of work, enabling business functions to be restored without significant disruption.

Key features include:

Wizard-driven management console. This console makes the product easy to use, even for those without extensive database administration experience. A wizard guides you through the scheduling process to reduce the possibility of errors. The Management Console also provides centralized management by automatically discovering all database servers and displaying them with status information.

Smaller archives. Acronis Recovery can create backup images that are up to 90% smaller than the original databases. Different compression levels are available to allow you to optimize for faster performance, smaller size, or a balance of both.

Encryption. For added security, Recovery uses industry-standard encryption technology; AES is available with three key lengths: 128, 192, and 256 bits.

Resource management. Companies can allocate CPU and bandwidth resources during the backup process to keep the process transparent to users.

Disaster recovery plan. Administrators can create and email disaster recovery plans that include step-by-step instructions for recovering database information. With these instructions, staff—even those without database administration skills—can restore databases quickly.

FTP support. For even greater peace of mind and security, Acronis Recovery for MS SQL Server lets companies back up database images offsite via FTP.

Acronis Recovery for MS SQL Server

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Gives companies the ability to recover a database to a good configuration in minutes

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WHAT'S HAPPENING

First-Rate Customer Service

Information Support Concepts Goes Out Of Its Way To Ensure Satisfaction

by Don Reisinger

• • •

IN AN ENVIRONMENT where technology is changing rapidly and data center managers are forced to find ways to improve upon efficiency and cost-effectiveness without sacrificing overall quality, some companies can help. They can alleviate some stress and offer products that provide robust alternatives to common data center issues, such as finding the best racks or using the best power equipment to get the most out of a process.

And although a variety of companies have been trying to make the data center manager's life a little easier for years, Information Support Concepts (817/649-1788; www.iscdfw.com), aka ISC, thinks it has a fresh look on how to do just that.

ISC Background

Information Support Concepts specializes in rackmount products, server racks, server cabinets, network racks, computer racks, computer cabinets, and much more. Aside from that, the company has expanded its base of products to include KVM switches and many other accessory solutions for the "network, IT, or telecom professional."

According to Kevin Hunt, vice president of sales and marketing for the firm, Information Support Concepts' mission since its inception in 1987 has been to "provide a way for the customer to get the correct product for the application in an easy format."

And it's that dedication to getting the customer the right product in the simplest format that sets Information Support Concepts apart from its competition. In fact, the company prides itself on customer service so much that it goes out of its way to ensure its Web site has an inordinate amount of information about products and allows customers to contact its product managers with any questions or concerns they may have.

Of course, rackmounts are not the only focus Information Support Concepts points to as the backbone of its business. According to Hunt, the company is currently working on improved KVM and power accessories that help data center managers get the most out of their daily operations.

According to Hunt, "KVM and power accessories are a key component of Information Support Concepts' plans going forward," and the firm believes that by focusing on mission-critical components such as those, the chances of it offering its customers the kind of products they truly want are significantly increased.

A Cut Above

When it comes down to it, many companies are offering the kind of products Information Support Concepts is. Realizing this, Hunt believes his company is unique in the way it does business and offers the kind of service other companies either don't have the ability to offer or simply don't want to.

Beyond that, Hunt is quick to point out that Information Support Concepts works alongside customers after their purchases to ensure they are getting the most out of the company's products.

"We are constantly keeping track of network priorities such as power, cooling, and best usage of their racking and providing products to address them," Hunt explains. "We also work with customers on custom modifications that will better fit their applications."

Hunt believes that working with customers is a key to Information Support Concepts' future and gives it an edge over the competition. As he points out, a variety of companies in the industry simply sell customers a product and forget the transaction ever occurred. But by being more hands-on than its competitors, Information Support Concepts believes it can provide a better experience that will make data center managers want to use its products and services.

Information Support Concepts' Goals

ISC is doing all it can to support an environment where data center managers can find a company that is willing and ready to address all of their needs, while the company tries to maintain a healthy balance of cost-effectiveness and profitability.

In order to achieve both of those goals, Information Support Concepts sets its sights on some major components that it believes will help carry it through the future and solidify it as the de facto brand in the industry.

Hunt says Information Support Concepts' first focus is to "provide products that meet the needs of today's network and telecom environment." He notes that by focusing its efforts on the telecom environment with as-yet unannounced technologies, his company is in the unique position of being able to provide services that enter through the data center but quickly extend out into other facets of the business.

Next, Hunt says, Information Support Concepts is in tune with its ability to provide online catalog pages that "clearly describe the product so the customer can buy what is best for their application." According to Hunt, information is key to making customers happy, and the company doesn't want to mislead or misinform customers in any way.

Aside from that, Information Support Concepts believes it's important to continue its focus on customer satisfaction. One important element of this is its ability to allow customers easier access to its account managers and/or product managers so the customers can quickly get in touch with those who are most knowledgeable about the given product.

Finally, Hunt explains that customer service is one of the most important facets of the entire business. Going forward, his company will continue to provide the same quality of rackmount products and power accessories, but it has found that what customers value most beyond the product is the ability to have the help they need, when they want it and how they want it.

In the end, Information Support Concepts may not be experimenting with too many products or forcing sales promotions on data center managers, but it is an organization that values its ability to provide its products to customers. And as the company moves into its third decade, it will focus most of its efforts on offering the same technologies to customers while providing a high-quality customer service component. P

THREE QUESTIONS

Powering & Cooling The Data Center

Data Center Resources Offers First- & Third-Party Solutions

by Tim Warner

DATA CENTER RESOURCES is a technical infrastructure solution provider that offers products and services that address core data center needs to help small to midsized enterprises power hardware, monitor networks, and manage data center floor space. Its three main areas of focus are rack-level solutions, control room solutions, and remote management.

■ What are the biggest IT-related issues facing today's small to midsized enterprise?

"The biggest concerns we hear are increased power and cooling issues created by today's more powerful servers," says Rick Berendes, co-founder and product manager at Data Center Resources (866/325-1121; www.datacenterresources.com), which also goes by the name Data Watch. To that end, the company focuses on developing server room solutions and helping its customers to integrate cabinets with power.

"We get calls every day from companies looking for ways to provide extra power or cooling for their network closets or small data centers," Berendes notes. "Many have already had a failure due to overheating or circuit overload and are now scrambling for a solution."

■ What should *Processor* readers know about your company's products?

Data Center Resources is a hybrid VAR, as well as a first-party manufacturer. In addition to creating its own line of data center hardware, it also offers solutions from a wide array of third-party providers.

"We are a solution provider that works with a customer to find the best alternatives for their unique situation," says Berendes. "In each product category, we work with several leading manufacturers. Our experience and expertise allow us to match the most effective solution to a particular application."

Data center furniture is an often overlooked aspect of a quality, high-performance network infrastructure. Accordingly, the company offers its Command Watch line, which incorporates handsome laminates and decorative doors and side panels. "We developed the Command Watch console furniture line to offer a cost-effective, furniture-quality solution to our customers," Berendes explains. "We can do custom units with a manufacturer like Evans or through Command Watch. Any custom furniture solution would be a variation of an existing product."

■ What makes your company unique?

"Our targeted focus on data center infrastructure allows us to stay current on new products and trends that affect that market," says Berendes. "We don't sell a lot of commodity-type products because these are so readily available from numerous suppliers."

One interesting innovation from Data Center Resources is its foray into providing services in addition to products for its customers. This service is called CoolAudit, and it is intended to help customers make the most efficient use of their existing data center cooling infrastructure.

"[CoolAudit] is a brand-new service we just started this year. One of our main focuses is providing products which enhance cooling efficiency in the data center. This is a big issue with small and large data centers since most are experiencing higher power and heat loads," says Berendes. "Many data center managers realize they have a problem but are not sure how to address it. We would regularly get calls and requests looking for recommendations. The problem is that each data center is unique, and it is difficult to offer suggestions without going onsite. We decided to offer a service to access the cooling efficiency in a data center and offer recommendations for improvement."

Berendes adds, "It is important to note that our recommendations are intended to maximize the cooling efficiency of the current infrastructure. We will not ask customers to completely rearrange their data center or make significant capital expenditures."

Berendes says that Data Center Resources' greatest strength is its market awareness and specialized services. "We are typically contacted when there is a more specialized need," he notes. "Our real value is an in-depth knowledge of the market along with a deep pool of product offerings."

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1U Server - ASA1401I

- 1TB Storage Installed. Max-4TB.
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- Supports 16GB FBDIMM.
- 4 Port SATA-II RAID Controller.
- 4x250GB hotswap SATA-II Drives Installed.
- 2x10/100/1000 LAN onboard.



2U Server - ASA2121I

- 3TB Storage Installed. Max-12TB.
- Dual-Core Intel(r) Xeon(r) Processor 5030,
- 1GB 667MHz FBDIMMs Installed.
- Supports 16GB FBDIMM.
- 12x250GB hotswap SATA-II Drives Installed
- 12 Port SATA-II RAID Controller.
- 2x10/100/1000 LAN onboard / 500W Red PS.



3U Server - ASA3161I

- 4TB Storage Installed. Max-16TB.
- Dual-Core Intel(r) Xeon(r) Processor 5030,
- 1GB 667MHz FBDIMMs Installed.
- Supports 16GB FBDIMM.
- 16 Port SATA-II RAID Controller.
- 16x250GB hotswap SATA-II Drives Installed.
- 2x10/100/1000 LAN onboard./ 800W Red PS.



5U Server - ASA5241I

- 6TB Storage Installed. Max-24TB.
- Dual-Core Intel(r) Xeon(r) Processor 5030,
- 1GB 667MHz FBDIMMs Installed.
- Supports 16GB FBDIMM.
- 24x250GB hotswap SATA-II Drives Installed.
- 24 Port SATA-II RAID. CARD/BBU (optional).
- 2x10/100/1000 LAN onboard / 930W Red PS.



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8U Server - ASA8421I

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- 2x12 Port SATA-II Multilane RAID Controller.
- 1x16 Port SATA-II Multilane RAID Controller.
- 2x10/100/1000 LAN onboard.
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STORAGE

FEBRUARY 22, 2008

Solidify Your Storage

BiTMICRO's 1.6TB SSD Has Ultra320 SCSI Interface



LACKING A HARD DRIVE'S mechanical latency, an SSD (solid-state disk) is much faster to respond to data requests in the multi-user, multitasking data center environment. SSDs are more shock- and vibration-resistant than hard drives and feature better temperature tolerances, lower power consumption, and silent and vibration-free operation. As prices fall and capacities increase, data centers will come to rely more and more on SSDs and other solid-state storage options.

Last fall, BiTMICRO Networks announced a 4Gbps Fibre Channel SSD in a 3.5-inch hard drive form factor with an astounding top capacity of 1.6TB. Now, the company has unveiled a variant with an Ultra320 SCSI interface. The enterprise-class drive is intended for business, military, and industrial applications.

The E-Disk Altima E3S320 family will come in capacities from 16GB to 1.6TB. The 16GB to 640GB models will have a 1-inch height, making them no larger than a typical 3.5-inch-wide hard drive. The larger versions will be 1.744 inches tall.

Inside, the E-Disk Altima uses SLC (single-level cell) NAND flash memory. It can sustain data transfers at up to 230MBps, the company says. Of course, being an SSD, the drive's throughput figure of up to 30,000IOps (inputs/outputs per second) is what really blows any hard drive out of the water.

BiTMICRO uses proprietary wear-leveling algorithms to extend the E-Disk Altima's life, as well as custom error correction code to preserve its data integrity. The drive employs the company's proprietary EDSA (Enhanced Datamover and Storage Accelerator) and LUNETA (Logical Unifier of Extensive Transfer Arrays) controllers.

The company should begin sampling the E-Disk Altima E3S320 in Q2 of this year. Volume shipments should follow in the Q3.

BiTMICRO E-Disk Altima E3S320

About $40 per gigabyte

High-capacity, rugged, low-power server storage in a standard hard drive form factor

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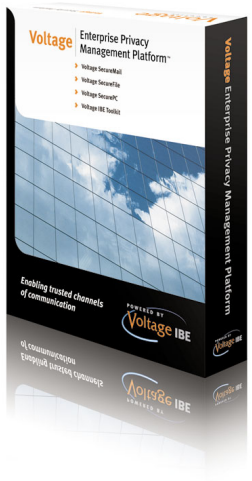
BiT MICRO NETWORKS www.bitmicro.com

SECURITY

FEBRUARY 15, 2008

Reliable File Encryption

Safely Manage Enterprise Documents With Voltage SecureFile



FUNCTIONING AS A MULTI-LOCATION backup manager, Voltage SecureFile uses encryption to protect sensitive documents wherever they're transported. This flexible tool can be used to safeguard personal information for your desktop, yet is applicable in broader networks. Optimum security measures are ensured when SecureFile Command Line executes scheduled safety procedures for imported files.

SecureFile features include:

Variable file encryption. SecureFile offers full encryption for any user, at any time, and in any place. This process can be appropriated to desktop files, batch files, or files located on collaboration portals. Protection doesn't end within the portals; SecureFile guards files after exiting the portal. Secure File's deployment is powered by Voltage IdentityBase Encryption.

Security service management. Security turns to service with VSN (Voltage Security Network). VSN is ideal for SMEs interested in full-service encryption management and offers decryption and encryption resources.

Desktop defense. Users are able to secure desktop files and guard them at any location. Utilizing Microsoft Information Rights Management, users can create access controls that live with the file's content rather than location.

Overall enterprise security. SecureFile has the capability to protect against data breaches and secure administrative documents for external file sharing. Additionally, automated key management supports group file sharing by instituting compliance policies.

Voltage Security SecureFile

Starts at $50 per user

Protects your data by encrypting any file format wherever it goes and however it's transported

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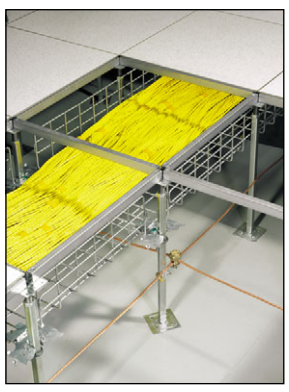
Voltage security

PHYSICAL INFRASTRUCTURE

FEBRUARY 1, 2008

Simpler Installation Of Underfloor Cabling

Panduit's GridRunner System Improves Cable Routing



INCORPORATING A CABLE-ROUTING system into an organization's existing infrastructure can be a costly and time-consuming process. However, with the right system that is both adaptable and easy to install, routing data and power cables under a raised floor does not have to be a tremendous drain on a company's time and resources. Panduit has released a new series of products that make cable routing quick and convenient.

Panduit's GridRunner system includes preassembled mounting brackets that make installation time-effective and ensure a company's new underfloor cable-routing system can get up and running in a minimal amount of time.

By providing the brackets, Panduit also helps companies reduce the cost of implementing the routing system.

The modular system consists of a series of wire baskets that make up the cable pathway; the drop-in wire basket sections make setup simple. When combined with the preassembled mounting brackets, there is no need to cut components to fit. The entire system is designed to assemble and install quickly.

The wire baskets also provide another advantage: With the open nature of the wire basket, air travels freely through this component to reduce the likelihood of overheating.

Panduit put a lot of thought into the design of the GridRunner components, and the parts do not damage cables due to poor design. The GridRunner parts have rounded edges and bend-radius control corners. Panduit has also used a bonding feature that electrically connects all components and provides electrical protection.

Because GridRunner is a series of individual parts, a company can combine drop-in wire baskets and preassembled mounting brackets in a way that makes sense for the company's IT infrastructure.

Panduit GridRunner Underfloor Cable Routing System

A modular underfloor cable-routing system that uses a series of drop-in wire baskets and preassembled brackets

(800) 777-3300

www.panduit.com

PANDUIT

PHYSICAL INFRASTRUCTURE

FEBRUARY 1, 2008

Reach Out To Remote Systems

Raritan Dominion KSX II Offers New Management Features In A Streamlined Package



WHEN NETWORK PROBLEMS and server errors crop up, IT personnel must be able to rapidly diagnose and fix the problem. That means remote access and control is necessary, and security is a must.

Enter the Dominion KSX II remote access appliance. The new model brings together serial-over-IP, KVM-over-IP, and power management and houses them in a streamlined package. The Dominion KSX II is intended for secure, out-of-band control of servers, PBXs, routers, and switches in branch offices and remote sites. It also supports virtual media file transfers to allow rollouts of updates and bug fixes.

Users have BIOS-level access to remote systems, right down to being able to reboot a server or restart a switch. (Some power monitoring and cycling requires Raritan's Dominion PX power strips.) A browser-based HTML GUI offers a top-down look at the equipment under the unit's control.

All of the Dominion KSX II's communications are protected with 256-bit AES and integrated authentication. It also supports strong passwords and locks out users after a number of failed logon attempts.

Another key feature is Absolute Mouse Synchronization, which maintains the remote user's mouse settings no matter which server is being controlled. The Dominion KSX II is CommandCenter-certified, so multiple units (and connected hardware) can be commanded from one IP address. That's a big help to organizations with far-flung resources.

Should the network fail, the Dominion KSX II offers a built-in modem with dial-back capability. The appliance works with AAA servers, as well as SNMP and Syslog event management systems.

The KSX2-144 includes four KVM, four serial, and two power control ports; the KSX2-188 has eight KVM, eight serial, and two power control ports.

Raritan Dominion KSX II

KSX2-144: $1,999; KSX2-188: $2,499

Remote access appliance with serial-over-IP, KVM-over-IP, virtual media, and power management features

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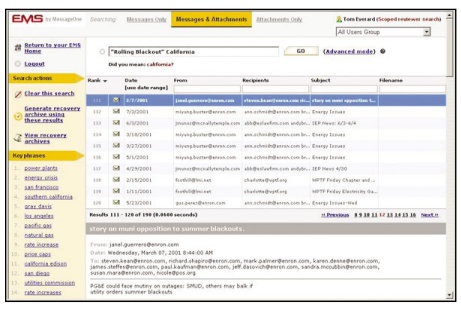
MESSAGING & TELEPHONY

MARCH 7, 2008

Get Compliant

Archive Your SME's Email With MessageOne's EMS Rapid Archive

TODAY'S LEGAL ENVIRONMENT mandates procedures for businesses in regard to email retention. Companies large and small not only have to maintain archives of all email passing through their systems, but they also have to be able to quickly produce particular messages during the discovery phase of litigation. Complicating matters is the need to stay abreast of revisions to state rules and Federal Rules of Civil Procedure, or FRCP.



MessageOne's EMS Rapid Archive securely backs up your company's email online and makes it searchable.

MessageOne's new EMS Rapid Archive can help. This cost-effective, rapid-ROI SaaS (software as a service) not only stores your organization's email messaging in a secure location, but it also makes it searchable in real time. When email passes through your company's system, a compressed and encrypted copy is automatically transmitted to the EMS data center. Furthermore, using EMS Rapid Archive, your company can place legal holds on key messages. This can prevent the destruction of key email evidence that may be needed for pending litigation.

IT personnel can centrally manage the service with fine control over message retention, as well as deletion at the appropriate time. This maintenance-free SaaS can be deployed in single day, according to MessageOne.

EMS Rapid Archive is based on the company's Managed Service Platform. It can integrate with Active Directory and coordinate with Microsoft Exchange to keep user information, distribution lists, and topology data synchronized. There's even an option to allow direct user access through Outlook.

MessageOne EMS Rapid Archive

$1 per user per month for 500 users

Email archiving SaaS helps you comply with federal and state rules regarding discovery and litigation holds

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SECURITY

MARCH 7, 2008

Security For The Virtual Realm

Catbird's HypervisorShield Guards Against Attacks

VIRTUAL INFRASTRUCTURES need the same level of security that companies use to secure their physical networks. However, today's endpoint security mechanisms can't secure the virtual infrastructure because they can't detect the threats that could compromise security. To aid in closing the security gap created by virtualization, Catbird launched HypervisorShield.

As a way of proactively securing virtualization deployments, HypervisorShield can continuously monitor the precise vulnerabilities, known attack signatures, and guest machine access of the hypervisor management network. A component of Catbird's V-Security, HypervisorShield is a group of settings that protects the hypervisor. Users can customize security for all parts of their company's network by selecting standard or custom settings.

Features of HypervisorShield include the ability to monitor and control access to the hypervisor network, detect malicious network activity directed at the hypervisor from virtual machines, and validate the secure configuration of hypervisor network services.

Because protection is delivered within the virtual network itself using Catbird's V-Agent virtual appliance, HypervisorShield can see inside the hypervisor. By monitoring from the inside, companies receive coverage that is more effective than other security offerings. Also, administrators do not need to reroute traffic onto the physical network for validation.

HypervisorShield's network access control monitors and quarantines for unauthorized devices on the management network. This provides automatic protection against inadvertent management error and malicious attacks.

Catbird HypervisorShield

Included as part of the Catbird V-Security package ($3,250 per VMware Host, plus $650 per year, or subscription pricing of $18/month per VM)

Guards against unauthorized hypervisor network access and attack

(866) 682-0080

www.catbird.com

catbird

STORAGE

FEBRUARY 29, 2008

Archive The Easy Way

QStar's Latest SntryStr Appliance Lends A Hand



FINDING STORAGE data management tools that conform to your SME's specific needs can be costly and frustrating. But QStar Technologies' second-generation SntryStr Archive Appliance is capable of handling a variety of applications to address almost any organization's data retention and archiving requirements.

The SntryStr features support for QStar's SntryPACS and SntryML apps, which let SMEs engage in medical image archiving and email archiving. QStar's platform is built around the Linux kernel and employs embedded data management software to manage connections to CAS devices, tape media, and optical sources.

The SntryStr lets users build around the unit's open architecture with support for SATA hard drives and the removable media. QStar offers two variants: the 1U rack-mountable QSS 2000 with 500GB, 750GB, or 1TB of mirrored data protection and the 2U rack-mountable QSS 6000 with up to 6TB of RAID-5 data protection. Users can also upgrade the QSS 2000 with up to three more storage expansion units that each support 15 hot-swappable drives. The QSS 6000 supports up to six more storage expansion units for up to 96TB of archive data.

Either model can be configured with one or two dual-core Intel Xeon processors and up to 4GB DDR RAM. Other features include an integrated ATI ES1000 controller with 16MB of dedicated SDRAM, a CD-RW/DVD drive, a dual-port auto-sensing gigabit NIC, automatic IP address assignment, iSCSI support, and a Fibre card.

QStar Generation-2 SntryStr Archive Appliance

Starts at $6,300, which includes 500GB of storage and support for 3TB of near-line tape or optical archiving

Updated rack-mountable archiving appliances ease management of regulated data

(850) 243-0900

www.qstar.com

QSTAR TECHNOLOGIES

STORAGE

FEBRUARY 22, 2008

Portable, Affordable Disk Backup

Teralyte Lets You Move Away From Tape For Offsite Backup Needs



Teralyte 2000

MOST SMALL TO midsized enterprises have been slowly moving toward disk backup as tape simply can't match the reliability and speed offered by disk. But many companies still rely on tape for at least a portion of the backup process, particularly for data stored offsite. The Idealstor Teralyte combines the speed of SATA disks with the portability and reliability of tape, making it possible for businesses to move to 100% disk-based setup for both backup and offsite storage.

The Teralyte is easy to use and integrate into almost any environment, and you can use it with your existing backup software or with the bundled iBac software. iBac only backs up files that have changed since the previous backup, reducing backup times, server load, and bandwidth. iBac's native format backup means restoring files is as easy as dragging and dropping them.

Once backups are complete, data can be replicated to other disks, or the Teralyte's Disk Management software can prepare disks for safe removal. Each Teralyte comes with a rugged shock-protective caddy and carrying case, so you can safely take disks offsite for backup and disaster recovery.

The Teralyte can use SATA disks of any capacity up to 1TB (native), from any manufacturer. It comes in three models: The Teralyte 1000 1-bay desktop unit, the Teralyte 2000 2-bay desktop unit, and the Teralyte 2000 Rackmount 2-bay unit. All models come with a PCI 32 eSATA controller and cables and require Windows 2003 Server or XP on the host system.

Idealstor Teralyte

Teralyte 1000: $1,995; Teralyte 2000: $2,995; Teralyte 2000 Rackmount: $3,495

Combines the speed of SATA disks with the portability and reliability of tape, eliminating the need for tape for backup and offsite storage

(301) 947-8737

www.idealstor.com

IDEALSTOR™ BACKUP APPLIANCE

NETWORKING & VPN

FEBRUARY 22, 2008

Boost Web Application Performance



A10 Networks' AX Series Next-Generation Server Load Balancer Provides Industry's Best Price/Performance

THE AX SERIES Advanced Traffic Manager family from A10 Networks provides a reliable, cost-effective platform that boosts Web application performance for organizations of all sizes. A10's AX Series is the industry's best price/performance next-generation server load balancer, including a suite of advanced application delivery features without additional licensing fees.

The AX's ACOS (Advanced Core Operating System) architecture is revolutionary by market standards because of its optimized multi-CPU architecture that is designed to handle today's bandwidth-intensive network environments.

The end result is a switch with uncompromised performance even when all features are turned on. Benefits include increased application performance, availability, and reliability, as well as an improved Web experience for customers and end users. With its 2U form factor, the AX Series also helps organizations reduce data center power, server, and rack space requirements.

All AX models feature carrier-grade hardware, the industry's best SSL (secure socket layer) and Layer 4-7 load balancing price/performance, support for IPv4 and IPv6, and an industry-standard command-line interface and easy-to-use GUI. They also include high-performance secure email and antispam features and load balancing for multimedia applications such as SIP.

A10 Networks AX Series

The AX Series is the industry's best price/performance next-generation server load balancer (888) 210-6363

www.a10networks.com

A10 Networks

STORAGE

MARCH 7, 2008

Multiplication For The Masses

Imation's New Disc Duplicators Enable Quick & Easy Duplication

OFFICES THAT NEED to duplicate large quantities of CDs and DVDs quickly and easily should consider Imation's new CD Duplicator and CD/DVD Duplicator. A touch of a button is all it takes to create copies of data using these duplicators.

The standalone duplicators are small and portable and do not require software, cables, or a PC. Because of their ease of use and portability, both duplicators can be transferred to meetings and offsite locations. This gives users the flexibility they need to create copies of important data on demand, regardless of whether a computer is nearby or if they're away from the office.

Inside the Imation CD Duplicator, you'll find a 52X CD-RW drive; the CD/DVD Duplicator features a 16X DVD+/-R/RW drive. Both are compatible with 12cm or 8cm discs.



Because the duplicators require no cool-down between duplications, you'll benefit from continuous copying without wait or lag time. A user-friendly menu on the front of the devices provides access to various features and functions.

The CD Duplicator can copy a master 700MB CD to CD-R media at up to 52X speeds in about two and a half minutes and can also duplicate CDs to CD-RW media at up to 32X speeds. Using up to 16X speeds, the CD/DVD Duplicator duplicates a single master 4.7GB DVD in about 11 minutes. This duplicator can also duplicate discs to CD-R/RW, DVD+/-RW, and DVD+/-R DL media. Both include a five-pack of Imation brand media.

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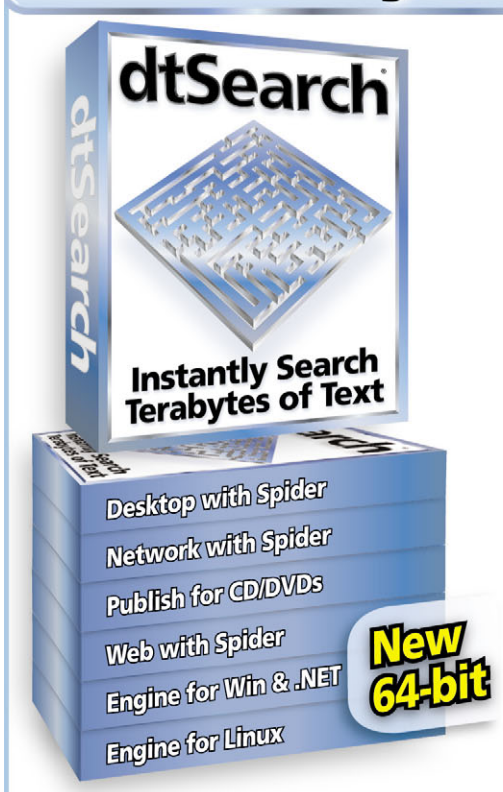
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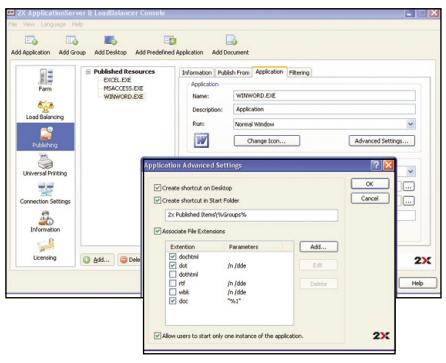
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NETWORKING & VPN

MARCH 7, 2008

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X2's New ApplicationServer v.6 Offers Secure, Flexible App Access



2X's ApplicationServer v.6 makes it easy to offer secure remote access to central applications and data.

With an easy-to-understand interface that significantly reduces the initial learning curve, 2X's ApplicationServer v.6 offers remote users secure access to centrally managed applications and data.

By installing ApplicationServer on a Windows Terminal Server system, admins can deliver and manage applications in a Citrix-like fashion without Citrix's high maintenance and upgrade costs.

With ApplicationServer v.6, the user's login credentials determine the applications available to him. It also allows access to multiple terminal server farms from a single client with SSL security. Even when accessing more than one server farm, only a single login is necessary.

A few features conserve bandwidth for maximum performance. ApplicationServer v.6 sends only screen updates to the client, not client-server data. The client can redirect email and Internet traffic through local apps, reducing traffic to the host server. Further mitigating unnecessary resource consumption, the server will keep apps from claiming large amounts of processing time and memory. The program limits clients to single instances of each application.

2X Software ApplicationServer v.6

Starts at $695; a free version with support for up to five client connections is available

Easy-to-use application publishing provides flexible, secure access to applications

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NETWORKING & VPN

FEBRUARY 15, 2008

Keep Tabs On Your Assets

RF Code System Tracks Rack-Level Equipment In Real Time

COMPANIES NO LONGER NEED to incur the high expenses associated with manually tracking a company's data center inventory. A new system from RF Code makes data center asset inventory nearly automatic. Not only does this system save time and money, but it also helps companies ensure compliance with regulations.



The three products in the system—the R100 Asset Tag, R200 Active RFID Rack Reader, and Zone Manager software—together create an automated inventory system that lets IT personnel perform real-time monitoring of rack-level assets. By implementing this system, a company can identify the location of any of its assets at any time.

What makes RF Code's system different than other asset-tracking systems is that it updates inventory data every few seconds. In contrast, a traditional hardware-based inventory system requires that individual items are tagged or barcoded and then scanned manually during inventory procedures. Traditional software-based inventory systems can only keep track of those servers that are plugged in and in their original locations.

The R100 Asset Tag has an industrial-strength adhesive backing to secure it to a standard U-mounted rack asset.

Once the R100 Asset Tags are mounted in a rack, they transmit signals that are received by the R200 Active RFID Rack Reader. The rack reader then reports the data it receives to the RF Code Zone Manager software, which can show the designated zones and the RFID tags in each zone. If a data center asset is installed or removed, or if its location changes, Zone Manager immediately alerts staff.

RF Code Asset Tracking System

Consists of three parts: R100 Active RFID Tags ($18.50 per tag), R200 Rack Reader ($995), and Zone Manager Software (price based on number of racks and tagged servers)

Uses software, asset tags, and an RFID reader to automatically track rack-level items for up-to-date inventory of data center assets

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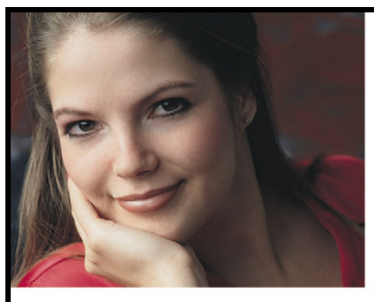

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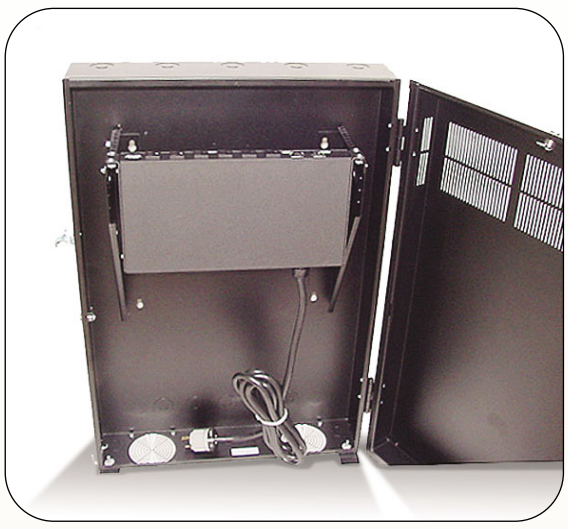
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